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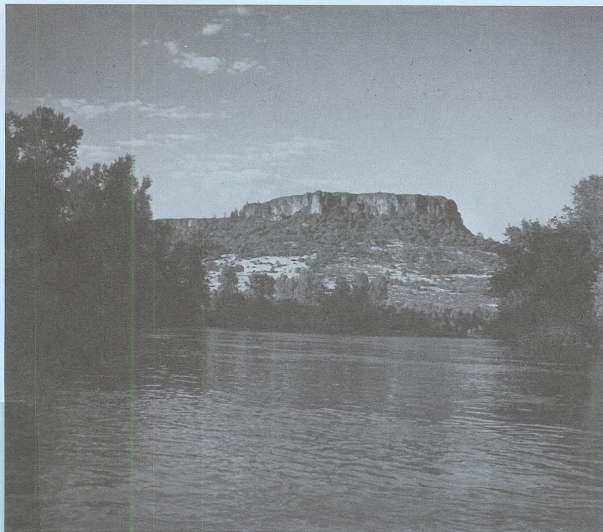
Medford District Office  
3040 Biddle Road  
Medford, Oregon 97504

October 1994



# Medford District Proposed Resource Management Plan/ Environmental Impact Statement

## Volume III



As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

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# Appendix V

## Draft Common Comment Synthesis/Partial Responses

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## Draft Common Comment Synthesis/Partial Responses

Many of the comments on the adequacy of the Draft RMP/EIS addressed specific elements of the preferred alternative that are no longer components of the proposed plan. Where the proposed plan had a corollary element, our responses to such comments treated them as if they applied to the corollary allocation. The most common example is comments on old growth emphasis areas (OGEAs). Our responses to those comments treat them as applying to late successional reserves in the proposed resource management plan (PRMP).

The acronym "SEIS", used in comment responses, refers to the 1993 Supplemental EIS on Management of Habitat for Late-Successional and Old growth Forest Related Species Within the Range of the Northern Spotted Owl. The term "FEMAT report" refers to the 1993 Report of the Forest Ecosystem Management Assessment Team, titled Forest Ecosystem Management: An Ecological, Economic and Social Assessment.

### Scoping

**Comment:** The BLM and the State of Oregon should convene an independent commission to study the specific ecological and administrative problems arising from the current ownership pattern.

**Response:** Funding for such an initiative would have to be authorized by the Congress and the State legislature. Such a proposal is beyond the scope of the PRMP.

### State Director Guidance

**Comment:** The State Director Guidance for the planning process should be amended to permit changes in the preferred alternative.

**Response:** The State Director Guidance, which was issued through a series of instruction memos during the years 1988 through 1992, did not directly address the formulation of the preferred alternative, and did not preclude changes in that alternative. The State Director never intended it to formally guide that aspect of the process and it did not direct any discretionary allocations or constraints in the preferred alternative. It also did not guide the development of the PRMP.

### Purpose and Need

**Comment:** The RMP/EIS should acknowledge the purpose of the O&C Lands, which is to be managed for the stability of local communities and industries through the production of timber under the principles of sustained yield, and should also reference important related judicial decisions.

**Response:** Chapter 1 has been expanded (see FSEIS ROD).

**Comment:** The documents never spell out clearly what decisions will be made as a result of this analysis.

**Response:** The Chapter 1 discussion, Purpose and Need for the Action, has been expanded to refer to the planning questions in Appendix B and to Table 2-1 where these decisions are summarized.

### Budget Assumptions

**Comment:** The Draft RMP does not include a cost analysis of the alternatives. It should include costs of all aspects of timber sales, such items as road building, sale preparation, monitoring, site cleanup, mitigation of environmental impacts, and restoration. Higher management costs would undoubtedly occur if the preferred alternative were adopted.

## Appendix V

- Response:** Ecosystem management focuses on the many activities required to manage a specific geographic area. This type of management is different from traditional program based management which focuses on costs and units of accomplishments in each individual program. For this reason cost comparison is limited to comparison of the total costs of the No Action Alternative and the PRMP (see Chapter 2, Costs of Management).
- Comment:** Consider the unstable nature of federal funding of forest management activities and the difficulties of securing this funding.
- Response:** The Introduction to Chapter 4 has been modified to address this.
- Comment:** How does BLM expect to obtain funding to implement ecosystem management with reduced harvest levels and higher predicted costs?
- Response:** We expect the Congress will be able to look beyond the traditional measure of timber sales, understand the importance of ecosystem management, and appropriate adequate funding for its successful implementation.
- Comment:** Evaluate the impact of lower funding levels on programs and outputs, including mitigation and monitoring. How will accountability for funding mitigation and monitoring support be verified?
- Response:** Since the essence of ecosystem management is balance, reduced funding levels would affect all programs and outputs proportionately. Mitigation and monitoring are considered to be part and parcel of timber sale and other implementation costs. In the priority setting process, managers will insure the integrity of program balance, including mitigation and monitoring, in the budget.
- Comment:** Review historic silvicultural plans, required budgets, approved budgets, activities conducted, and reasons for the differences.
- Response:** Much of what is requested demands an analysis of political decisions made at high levels of past administrations and/or during legislative deliberations in Congress. Although the analysis would make an interesting if lengthy article, we believe it would suggest little about how such deliberations and decisions will come out in the 1990s.
- Comment:** "Preliminary estimates indicate that the costs (of implementing Alternatives C, D, and the PRMP) would be about 2.8 times traditional costs per unit of output." All alternatives were based on the assumption that adequate funding and manpower would be available. Economic efficiency or the lack thereof, apparently played no role in the selection of the preferred alternative. We have no basis for judging which of the alternatives might require unreasonable levels of funding, or might actually represent negative investments.
- Response:** When the investments are being made in part, to accomplish economically nonquantifiable ecosystem management objectives, cost-benefit analysis is not considered a useful tool. Economic efficiency analysis may be relevant in choosing among management practices, but would be best applied in site-specific planning.

## Organization of Document, Editing, and Maps

- Comment:** It was difficult to distinguish the Draft RMP from the Draft EIS. For example, implementation standards were scattered throughout the document.
- Response:** Chapter 2 has been reformatted to clearly display proposed objectives and link them to management direction for each resource.

- Comment: On the s more geographic places and towns should be shown and named, more streams named, and secondary roads indicated.
- Response: The level of detail of geographic naming was limited so as not to clutter the s.
- Comment: s showing land allocations are too small a scale with few reference points.
- Response: A reference grid has been added to the new PRMP s. The scale is considered adequate for an environmental impact statement. For more detail, see s available for review in the district office.

## **Planning Schedule**

- Comment: The final RMP/EIS and Record of Decision should not be completed before completion of Endangered Species Act consultation.
- Response: We consider consultation on our RMP already accomplished by the consultation and resultant biological opinion from the Fish and Wildlife Service on the FSEIS. Additional consultation will occur as project planning follows the RMP.
- Comment: The deficiencies of the draft plan warrant BLM developing a revised or supplemental draft before proceeding to the final stage.
- Response: BLM, with the Forest Service, prepared a Final SEIS on Management of Habitat for Late-Successional and Old growth Forest Related Species Within the Range of the Northern Spotted Owl (FSEIS).
- Comment: The BLM must make clear the decision making rationale used to arrive at the preferred alternative. This should include the decision makers' assumptions regarding risks and probabilities, and document the degrees of uncertainties associated with the major economic, technical, and social factors influencing the decision process.
- Response: Chapter 1, Purpose and Need, has been expanded.
- Comment: The RMP should be using a watershed approach to land and resource management.
- Response: The FSEIS requires that planning occur on a watershed basis. This could include river basins, analytical watersheds, subwatersheds, and bioregions. Watershed analyses will also occur on some watershed basis.

## **Coordination With Other Parties**

- Comment: If other federal lands are the key to success of an alternative, identify the related coordination and cooperation planned.
- Response: Chapter 5 has been expanded to address this. Such coordination is addressed in the FSEIS ROD.
- Comment: All lands within the aboriginal territory of the Confederated Tribe of Coos, Lower Umpqua and Siuslaw Indians can still be considered "Indian Country," as the President never signed into law the only document ceding rights of ownership of the aboriginal territory (Treaty of 1855).
- Response: "Indian Country" is legally defined as (a) land within a reservation, (b) land held in trust by the federal government, or (c) dependent Indian communities. See 18 U.S.C. § 1151. Although this definition is found in the criminal statutes of the United States, it has been utilized by the courts

in civil proceedings as well. Under this definition, there is no "Indian Country" on the lands managed by the BLM in western Oregon.

The Coos, Lower Umpqua, and Siuslaw Indian Tribes unsuccessfully litigated their rights as "aboriginal owners" of lands in western Oregon before the Court of Claims in 1938. See *Coos Bay, Lower Umpqua, and Siuslaw Indian Tribes v. United States*, 87 Ct.Cl. 143 (1938), cert. denied, 306 U.S. 653 (1939). By the Coos Restoration Act in 1984 Congress restored a trust relationship with these tribes which had been terminated in Act of August 13, 1954, 68 Stat. 724. See 98 Stat. 2250 (codified in 25 U.S.C. § 714). However, the only lands included in the restored reservation were three small parcels of land located near Coos Bay. See 25 U.S.C. § 714e.

**Comment:** The Confederated Tribes should be contacted for review of any activity permanently altering the land, minerals, vegetation on, or access to their aboriginal lands. The tribal office should receive copies of environmental assessments, FONSI's, EISs, and other notifications of actions.

**Response:** A Memorandum of Understanding, currently under development with the tribal government, will identify those activities that the Confederated Tribes will be contacted and receive official BLM documents about.

**Comment:** There needs to be a way for the public to comment after acceptance of the Draft plan.

**Response:** The public has an opportunity to comment on the proposed resource management plan (PRMP) for 30-days following issuance of the PRMP/FEIS.

**Comment:** I want to know if the BLM is coordinating with County plans, is it following its multiple use charge and paying attention to the Oregon economy.

**Response:** This is addressed in the Consistency section of Chapter 4.

**Comment:** According to Medford District's RMP, page xxiii, BLM planning regulations require that RMPs be consistent with officially approved or adopted resources-related plans, and the policies and procedures therein of the federal agencies, state and local governments and Indian tribes. BLM's RMP fails to be consistent with the Butte Falls Comprehensive Plan.

**Response:** The requirement is to be as consistent as practical.

**Comment:** A regional biological diversity plan should be a part of the RMP, but given the time frame of the RMP, we recommend that the RMP direct the district to work with other agencies and interested organizations to develop a biological diversity plan for southwestern Oregon.

**Response:** A regional biological diversity plan has been accomplished through the FSEIS ROD.

**Comment:** The Medford District BLM office should take steps to "compare with adjacent districts to ensure that data and analysis is consistent along boundary lines," and make sure all special staff have had this contact. Coordination seems to be lacking.

**Response:** Coordination with adjacent districts has occurred.

**Comment:** Since the expression of public policy and balancing of conflicting uses is the role of the comprehensive land use planning process, the BLM RMPs must be consistent with the local comprehensive plans.

**Response:** Consistency is addressed in Chapter 4. BLM is required to be "consistent to the degree practical."



**Comment:** We strongly recommend that BLM utilize up-to-date scientific information sources (e.g., the Gang of Four's "Alternatives for Management of Late-Successional Forests of the Pacific Northwest," the USFWS' "Draft Recovery Plan for the Northern spotted Owl, Forest Services' "PACFISH") in the development of the Final RMPs and EISs.

**Response:** This information has been utilized in the preparation of the FSEIS and by incorporation into this document.

## **Goals and Objectives**

**Comment:** It was difficult to identify plan policies in the RMPs. The RMPs should identify the expected future condition.

**Response:** Explicit PRMP objectives have been added for each topic in Chapter 2, to address these concerns.

**Comment:** There should be a stronger link between the plan's broad goals and the specific actions that will be undertaken. In general, standards and guidelines need to be established.

**Response:** The objectives that have been added for the PRMP provide that link and, along with management actions/direction, equate to standards and guidelines.

## **The Preferred Alternative**

**Comment:** A table showing the acreage in each land classification would help the reader determine the significance of restricted areas.

**Response:** Allocations overlap so any table oversimplifies. However, a table has been included in and is shown in the summary.

**Comment:** The RMP should use a watershed approach to land resource management.

**Response:** The FSEIS decisions which has been incorporated into our PRMP, details a four tier approach to land resource management: regional, physiographic or river basin, watershed, and site specific or project level. Under this approach, analysis starts at the watershed level. The planning units will be physiographic province or river basin, consisting of a number of watersheds. Watershed based planning will be implemented and, over time, the federal agencies including the BLM will switch from existing planning units to the provinces or modify the boundaries of current planning units to be more compatible with the watershed based approach.

**Comment:** BLM's long term projections are unreliable due to the vagaries of time and changing political and economic agendas. Adoption of any Alternative should be a short term action only.

**Response:** We recognize that the plan adopted will be replaced by another plan within 10 years or so. Yet, only in the long term can we attain many of the plan's key objectives, so much of the plan's focus remains long term.

## **Legal Consistency of Preferred Alternative**

**Comment:** The draft plans have not explained how ecosystem management in the preferred alternative is consistent with BLM's legal mandate for O&C/CBWR lands, including its community stability requirement.

## Appendix V

- Response:** The FSEIS ROD addresses this and discussion has been added to chapter 2, Purpose and Need, of this PRMP/FEIS.
- Comment:** The preferred alternative makes timber production the residual rather than the dominant use, because lands are first set aside for riparian and other uses, and the residual land is further managed for old growth restoration. This subservient position for timber violates the O&C Act.
- Response:** Management of these lands under the O&C Act mandate is to provide a sustainable level of timber production and must also be reconciled with other laws such as the Endangered Species Act and the Clean Water Act. The need of the local communities and industry for a stable timber supply is certainly of concern in the management decisions for the O&C lands. The design of the preferred alternative and the PRMP is our attempt to manage the O&C lands in a responsible manner. Such management is intended to allow as high a level of sustainable timber supply as possible without risking further curtailments in the timber supply in the future due to the requirements of a myriad of other laws under which the BLM must operate. While the mechanical PSQ calculation hierarchy may make it appear that timber production was the last concern in the decision-making process, this does not mean that it was subsidiary to other uses of those lands.
- Comment:** Since the Alternative A level of riparian protection meets legal requirements, selection of that level of riparian protection would be most consistent with the O&C Act.
- Response:** The level of riparian protection included in the PRMP was selected not only to meet current legal requirements, but also to promote the goals of watershed protection contained in the O&C Act and to provide sufficient protection to reduce the potential for listing of aquatic species as threatened or endangered. Taking into consideration the anticipated benefits to the quality of watersheds in the O&C Act, it does not necessarily follow that the alternative with the least riparian protection allowed by law is the "most consistent with the O&C Act."
- Comment:** Lowering the minimum harvest age by releasing arbitrary constraints on it would seem be most consistent with the O&C Act, particularly considering the difficult timber supply situation.
- Response:** While the O&C Act does not set "arbitrary constraints" one way or the other about the rotation age or minimum harvest age of the timber, the purposes of the O&C Act in providing a long term sustainable timber supply may be adversely affected by lowering the minimum harvest age. The level of sustainable harvest over the long term could be reduced if the minimum harvest age is significantly lowered below the age of the culmination of mean annual increment. Intensifying harvest activities of the lands included in the GFMA by lowering the minimum harvest age could also have adverse effects on the quality of watersheds on the O&C lands. Such results cannot be considered as "most consistent with the O&C Act."
- The environmental impacts of harvesting much younger trees must also be considered. Lowering the minimum harvest age in the GFMA could have significant adverse impacts on the ability of protected species such as the northern spotted owl to disperse throughout their range, and possibly cause the BLM to violate the Endangered Species Act.
- Comment:** The exclusion of O&C forest land from exchange for lands to be managed for single use management purposes relative to listed species appears to conflict with Section 7(a)(1) of the Endangered Species Act.
- Response:** Congress in Section 7(a)(1) did not direct the Secretary to ignore the limitations in statutory authorities for other Interior programs when it directed the Secretary to use these authorities to further the purposes of the Endangered Species Act. The O&C Act requires those lands to be primarily managed for timber. The BLM would violate its statutory authority under the O&C Act for the management of these lands if we were to exchange O&C timberlands for property intended for use primarily as wildlife habitat. See *Headwaters v. BLM*, 914 F.2d 1174 (9th Cir. 1990). Thus, the proposal to exclude the O&C lands from exchanges for lands intended for purposes other than multiple use does not conflict with the promotion of conservation of listed

species under §7(a)(1), since that section does not require agencies to violate their existing statutory authorities to accomplish its purposes.

**Comment:** In order to comply with NEPA, BLM must review its prior decisions represented by its Grazing Management EIS, Northwest Area Noxious Weed Control EIS, Western Oregon Management of Competing Vegetation EIS, and the Wild and Scenic River Management Plan. Grazing, noxious weed control, vegetative management and wild and scenic river management are management activities and should be addressed in total with other management activities.

**Response:** It is consistent with both the FLPMA and the NEPA to incorporate prior valid decisions into the RMP without further formal analysis. Before doing so we did review them to assure ourselves those decisions remained appropriate. Wild and Scenic River management plans are activity plans which are locally specific and more detailed than, but consistent with, resource management plans.

**Comment:** Is Visual Resource Management consistent with the O&C Act?

**Response:** Management of O&C lands allocated for timber production, to concurrently meet visual resource management objectives, is consistent with the O&C Act.

**Comment:** We are concerned that managing for visuals may cause a reduction in productivity on O&C lands. If this is the case then a cost benefit study needs to be done. Loss in timber receipts to the counties must be avoided if at all possible. This is an extremely important point when the issue of rural interface is discussed.

**Response:** The VRM allocation to classes III and IV will have no adverse affect on PSQ. Some reduction does occur for VRM Class II.

**Comment:** The Oregon Forest Practice Act (OFPA) is imbedded in the Douglas county Comprehensive Land Use Plan, and is the benchmark which the BLM should review its own proposals for consistency.

The OFPA is the model for the rest of the nation and was crafted in an open public forum with widespread public involvement and legislative review. Given this intensive public and legislative scrutiny, any departure from the OFPA should be identified as an inconsistency.

If the BLM chooses not to act consistent with the OFPA, it is required, by its own regulations, to provide not only the rationale for acting inconsistent with the OFPA but also a range of alternatives. In developing alternatives to the OFPA, we recommend that the BLM also prepare a cost-benefit analysis relative to any departure from the Oregon Forest Practices Act.

**Response:** Consistency of the PRMP with the OFPA is addressed in Appendix Y. Although a few literal (technical inconsistencies are identified, we consider the PRMP consistent with the goals of the OFPA.

## **The No Action Alternative**

**Comment:** The No Action Alternative should be "no activities."

**Response:** It is well established that in land-use plan EISs by federal land management agencies, the No Action Alternative is continuation of the existing plan. According to the Council on Environmental Quality in an action updating a land management plan where an ongoing program under existing legislation is taking place, the "no action" alternative is the alternative of "no change" from current management direction or level of management intensity. "To construct an alternative that is based on no management at all would be a useless academic exercise." (Answer to Question

3 of CEO's "NEPA's Forty Most Asked Questions", 46 Fed. Reg. 18026 (Mar. 23, 1981), as amended.)

Comment: Note the current level of survey, monitoring, and inventory which is done regularly.

Response: Monitoring under the current plan is described in Oregon State Office Manual handbook H-1734-1, 162 pages long. Survey and inventory procedures are equally detailed, by resource. Copies of these procedures are available for review in the District office.

Comment: The Medford District received two new alternative proposals as described below:

A. The first proposal was a recompilation of various recommendations from alternatives NA-PA.

B. The second new alternative contained many recommendations not addressed in the Draft RMP/EIS or were refinements of recommendations contained in the Draft.

Response: A. These recommendations were analyzed for possible inclusion in the preferred alternative of the Draft RMP/EIS and the proposed plan of the PRMP/FEIS. No further analysis is necessary.

B. Copies of the second new alternative were given to appropriate RMP team members for their review and response. Their responses to new proposals are included under various topics. Therefore, there is no one consolidated response to this new alternative. However, it should be noted that many of these proposals were very pertinent and have been included in the proposed plan. Also, some of the proposals were similar to options analyzed through the FSEIS on Management of Habitat for Late-Successional and Old growth Forest Related Species Within the Range of the Northern Spotted Owl. Other proposals were outside the scope of the RMP or considered issues not identified for analysis through this RMP.

Comment: The alternatives do not seem to comply with existing laws. We realize that the Environmental Protection Act allows discussion of alternatives which are illegal—for the sake of comparison—but of the seven alternatives considered, A and B may not meet the Endangered Species Act and, with regard to intensive forest management; C, D, and E may not comply with the O&C Act. This tends to narrow the field.

Response: Identification of alternatives that comply with the Endangered Species Act has been a moving target throughout the planning effort, as more is learned about the northern spotted owl and the Fish and Wildlife Service and other agencies issue related documents. It remains somewhat unsettled, as there is not yet a Final Recovery Plan for the northern spotted owl. Compliance with the O&C Act must be considered in light of other statutes. See first four responses under Consistency of Preferred Alternative.

## New Alternative Proposals

Comment: Assess alternative harvest priorities that maintain more options for the "old growth" in the GFMA. Include alternatives that rely more on partial cuttings.

Response: In response to public comment and the President's forest plan, PRMP harvest priorities in the GFMA have been changed so that there will be a greater emphasis on commercial thinning of mature and younger stands and less emphasis on regeneration harvests of intact old growth stands.

Comment: It is recommended that BLM add a fisheries emphasis alternative. It would be based on the Alternatives for Management of Late Successional Forests in the Pacific Northwest.

Response: An integral component of the (new) PRMP is fisheries emphasis.



- Comment:** Evaluate the effects of longer rotations and higher minimum harvest ages on all lands administered by BLM.
- Response:** For the Medford District, sensitivity analysis of Alternative B in the Draft RMP/EIS analyzed the effects of both 150 year rotations on managed lands and also of 250 year rotations on protected lands. Sensitivity analysis of the draft PA analyzed the effect of having an unconstrained minimum harvest age and also the effect of having a minimum harvest age of 60 years.
- Comment:** Develop and analyze other alternatives which retain biologically significant old growth stands while still producing economic opportunities.
- Response:** Alternatives C, D, E, and the PRMP, as well as all other alternatives analyzed in the recent FSEIS, all do this to varying degrees. We do not believe adding more such alternatives would be particularly useful.
- Comment:** The Medford District received 2 new alternative proposals as comments on the Draft RMP/EIS.
- Response:** A. The first new alternative proposal was a reconfiguration of land use allocations and management actions primarily from alternatives D, E, and the PA into a new alternative. As this was a reconfiguration, it contained no new options. Also, the impacts associated with implementing such an alternative were already considered in those others alternatives.
- B. The other new alternative proposal contained a variety of conservation/preservation land use allocations and management actions that were considered inconsistent with the goals and objectives of Alternatives NA-PRMP. This new alternative proposal contains such recommendations as protection of all roadless areas greater than 1,000 acres as wilderness, management of DCAs consistent with the Draft Recovery Plan for the Northern Spotted Owl, greater designation of wild and scenic rivers, expanded protection of old growth timber, etc. Most, if not all, of these recommendations were considered in one or more of the alternatives addressed in the SEIS. Also, many, but not all, of the recommendations were incorporated into Alternative 9 of the SEIS and the FSEIS ROD and subsequently into the PRMP. Impacts associated with implementing the recommendations were analyzed in the SEIS or are included in this document where such recommendations are incorporated into the PRMP. Responses to specific recommendations are found throughout the comment/response section of this document.

## **Impact Analysis Generally**

- Comment:** A 10-year short term impact time frame is not equally appropriate for all resource categories. Consider varying according to the life spans of affected biota.
- Response:** The 10-year period was selected as the end of the period before the RMP is most likely to be revised. Keying to the life-spans of affected biota is more relevant to a project EIS, such as for a dam or oil and gas leasing. Where available information suggests that intermediate term impact conclusions would be substantially different than the trend implied by short term and long term conclusions, that has been acknowledged.
- Comment:** Assess spatial feasibility of the harvest plan in future decades.
- Response:** A major constraint on spatial feasibility in BLM's checkerboard ownership pattern is harvest activity on other ownerships, particularly private land. Future harvests on private lands are often not the subject of long term plans, often proprietary even if plans exist, and subject to rapid change due to market conditions, changes in ownership and other business considerations. Even spatial feasibility of the 10-year scenario is speculative given these considerations, and must be revisited during annual timber sale planning. The elaborate exercise entailed in extending the 10-year scenario out several decades would prove little.

## Appendix V

- Comment:** In some parts of the document, private lands are excluded from consideration, while in others BLM appears to be using private lands for mitigation.
- Response:** In no case does BLM suggest that it can control activities on private lands, except for the indirect control that may occur where specific access across BLM-administered land may be denied due to overriding environmental constraints such as the Endangered Species Act. Expected management on private land, however, is sometime cited as providing certain consequences, for example, adequate elk forage.
- Comment:** Identify where private land management is hindering the achievement of ecological objectives.
- Response:** Our assumption is that all private forest management, whatever it is today, may become short-rotation intensive forest management. That is the basis for all cumulative effects analysis. BLM's ecological objectives reflect that assumption.
- Comment:** Soil erosion, watershed degradation, stream sedimentation, and forest habitat destruction must all be analyzed with adjacent lands factored in.
- Response:** Soil erosion (soil loss as distinguished from stream sedimentation) is a site specific concern; cumulative effects of soil loss with other ownerships are not relevant to BLM's management decision. The balance of these concerns are addressed broadly in the FSEIS and will be more specifically addressed in watershed analyses.
- Comment:** Consideration for catastrophic loss should be factored into the plans.
- Response:** Risks of catastrophic loss have been used in the design of the PRMP and in the analysis of effects. These risks are high for southwestern Oregon primarily in terms of wildlife habitat loss.
- Comment:** BLM has not done a risk analysis and developed contingency plans for OGEAs and CAs that potentially could be destroyed by a catastrophic event.
- Response:** As is discussed in Appendix O of A Conservation Strategy for the Northern Spotted Owl (1990), the original habitat conservation areas suggested in that document were distributed so as to hedge against catastrophes that could cause regional but not total extinction of the spotted owl. The late-successional reserve system is similar. The Draft Recovery Plan and the EIS both specifically address catastrophic loss of habitat. The dispersal of connectivity diversity blocks will also function as a hedge against major ecosystem impacts from catastrophic events. Risk analysis was incorporated into the FSEIS. Contingency planning would have to be based on a multiplicity of "what ifs." We consider it more relevant to adapt our management as appropriate after a specific catastrophic event occurs.
- Comment:** The environmental costs of relying on foreign, non-sustainable resources for forest products has been overlooked. The plan also ignores the other environmental costs — higher energy consumption, increased CO<sub>2</sub> emissions, accelerated depletion of nonrenewable resources — of relying more on substitute building materials.
- Response:** Assessment of the environmental costs of substitute sources of timber or substitute building materials would entail much conjecture about international markets and is beyond the scope of a single Resource Management Plan EIS. We are aware, however, of some regionwide analyses of this topic, and discussion of them has been added to Chapter 4, Socioeconomic Conditions.
- Comment:** Identify the economic, recreational, commercial, and aesthetic values of key wildlife groups or species.
- Response:** Recreation and aesthetic values are not distinguishable and are incorporated in the EIS sections on recreation. Stratification of values by key wildlife group or species is not practical due to lack of consistent, comparable sets of data. Some economic and commercial values of game animals

and fisheries have been indirectly captured through the analysis of recreation-dependent and fisheries-dependent personal income and employment. We recognize that these analyses do not capture all of the values associated with key wildlife groups or species.

**Comment:** Wildlife tree retention causes increased operational costs and safety risks, which have not been adequately analyzed.

**Response:** In the PRMP, a series of stand structural classes have been designed to meet a variety of resource management objectives and to produce stands with desired characteristics over time. An integral part of the structural class is retention of snags and green trees. Worker safety would not be compromised to achieve resource management objectives. Retention of snags and green trees for wildlife or other objectives does increase operational costs as compared to the complete harvest of stands. However, average costs for snag and green tree retention under the PRMP would not be expected to be much different than costs required to complete shelterwoods, perform overstory removals and partial cut harvests while retaining wildlife trees under the plan for the 1980s.

**Comment:** Identify the cultural and subsistence needs of Indian tribes or Nations and how well the preferred alternative meets these needs.

**Response:** The identification of the "cultural and subsistence needs of Indian tribes or Nations" at any point in time is a difficult undertaking. Each Tribe or Nation may define these needs quite differently. In addition, these needs change over time as does the situation in which Indian tribes or Nations find themselves.

We intend to take the needs of Indian tribes or Nations into consideration. However, the identification of these needs is of necessity a shared responsibility. Therefore, we and the Tribes must jointly develop a process whereby information concerning the interests and needs of each Tribe or Nation is shared. The Memorandum(s) of Understanding presently in development with [name tribes] constitute(s) an important step in this process of information sharing.

**Comment:** If helicopter use is an option for accessing and harvesting timber sales, include a discussion of noise impacts.

**Response:** Discussion has been added in Chapter 4, Recreation and Rural Interface Areas.

**Comment:** For existing or proposed livestock grazing permits, analyze effects on water quality, condition and management strategies for riparian zones and watersheds, impacts on biological diversity, special status species in grazing allotments, cumulative effects of grazing and other management activities, and proposed livestock improvements.

**Response:** Livestock management is not addressed in the PRMP except for two administrative concerns in Chapter 2. The final PRMP is tied to Medford Grazing Management Final EIS.

**Comment:** Effects of insects and diseases, other than on timber production, are hardly mentioned.

**Response:** Discussions of forest health have been added to both Chapters 3 and 4, Biological Diversity.

**Comment:** Because of the checkerboard nature of BLM lands, and the responsibilities they have to the public, it seems probable that the BLM will have to forgo actions in order to help compensate for action being taken on private lands. This may be particularly apparent when 50-11-40 rule is implemented. However, troublesome this may be to the BLM, it is a gift to the public. In short, the cumulative effect analysis needs to account for the checkerboard nature of the landscape better and the RMP needs to compensate for it.

**Response:** A number of the management actions proposed are intended to compensate for the intermingled land pattern and the cumulative effects analyses explicitly recognize it. The scientists who initiated the 50-11-40 rule, however, concluded that it need not be applied in cumulative sense and the SEIS analysis of impacts on spotted owls assumes that it would apply only on federal lands.

## Air Resources

**Comment:** Ten years is not an appropriate time frame for assessing effects to air quality. At a minimum short term air quality impacts should be analyzed under the shortest practicable period of time related to the implementation of specific activities.

**Response:** The short term air quality impacts identified are actually average annual impacts throughout the 10-year forecast period.

**Comment:** Statements that air quality management will be in compliance with applicable laws and regulations do not inform the decision maker or the public of how the district will be in compliance and the projected impacts of prescribed fire emissions.

**Response:** Chapter 2 has been revised.

**Comment:** Various terms, such as nonattainment and designated areas, are used in the text without definition. These terms must be understandable by the public, and must be used consistently between Districts.

**Response:** These terms are included in the glossary.

**Comment:** Smoke sensitive areas on the maps need to be labelled, and each District plan should identify which areas are most likely to be affected by that District's prescribed fire activities. This discussion should also include why each areas has been designated.

**Response:** The air quality discussions have been revised.

**Comment:** The final RMP should discuss all the applicable regulatory and/or permit requirements, including National Ambient Air Quality Standards, Prevention of Significant Deterioration, and visibility impairment in Class I areas. The Oregon Smoke Management Plan also needs to be fully described, as well as its relationship to the State Implementation Plan.

**Response:** Chapter 3 has been revised.

**Comment:** The Draft RMPs include reference to the BLM's smoke surveillance for intrusions. What is this, what does it measure, and how are intrusions reported? What are the District's contributions to reported intrusions? What further monitoring standards and methods will the BLM use to measure compliance with the Clean Air Act and State Implementation Plan standards?

**Response:** The air quality discussions have been revised.

**Comment:** The Draft RMP assumes uniform burning conditions across the district. These differences need to be fully disclosed in the Final RMP.

**Response:** The air quality discussions have been revised. Additional consideration of these differences are more appropriately addressed at the watershed or province planning levels, as identified in the FSEIS.



- Comment: A more complete comparison is needed between regulated pollutants and expected emissions, especially PM10.
- Response: The Air Quality section of Chapter 3 has been revised.
- Comment: The types of use of prescribed fire in the RMP need to be identified and fully discussed. Particularly, the dispersion conditions of low-intensity fire need to be discussed along with potential impacts to air quality.
- Response: The air quality discussions have been revised.
- Comment: More thorough analysis of emission reduction techniques and alternatives to the use of prescribed fire is necessary in the Final RMP.
- Response: The air quality discussions have been revised.
- Comment: The Final RMP needs to disclose potential impacts to persons in the Rural Interface Areas.
- Response: The Air Quality section, Chapter 4, has been revised.
- Comment: The analysis needs to include consideration of more complete utilization of slash materials as an alternative to broadcast burning.
- Response: The air quality discussions have been revised.
- Comment: The Final RMP needs a discussion on the decision process of using prescribed fire.
- Response: Chapter 2 has been revised. Additional rationale can be found in the FSEIS.
- Comment: The impact of the District's firewood program on neighboring communities' air quality needs to be considered.
- Response: The Air Quality section of Chapter 4 has been revised. The amount of available firewood is expected to decline sharply, due to decreased timber harvest levels and increased retention of coarse woody materials for ecosystem management objectives, including wildfire requirements.
- Comment: The assumption that "local climate patterns of historic record and related conditions for plant growth would continue" indefinitely (pg. 4-4) contradicts the BLM's own recognition that "global...temperatures increases could range from 1 to 5 degrees Celsius by the year 2100" (pg. 4-7). It also ignores the fact the BLM does consider global warming in its biodiversity analysis when it admits that "if climate of the planning area changes substantially over the long term, the loss of connectivity due to fragmentation...could create barrier(s) to migration..." (pg. 4-35). These kinds of discrepancies not only damage the credibility of the assumption, they raise serious questions about the validity of the entire planning process. What are the possible impacts on timber yield, fire frequency and biodiversity, if the temperature increases as projected? The BLM utterly fails to consider these critical and increasingly likely global warming impacts, claiming that the consequences of global warming are not quantifiable. Yet, the agency easily projects significant, though empirically speculative, increases in growth and yield of Douglas-fir plantations hundreds of years into the future.
- Response: While we consider it appropriate to implement a plan that is hedged against the possibility of ecological change caused by climate change, there is no scientific consensus on which to base an explicit assumption of the rate or degree of such change in southwestern Oregon. Nor, if there were, is there an adequate scientific basis for translating such changes into expected changes in timber yield or biological diversity.

## Soils/Site Productivity

**Comment:** Address ways to reduce soil compaction.

**Response:** Soil compaction is an unavoidable adverse impact when heavy equipment is permitted on the land. However, the PRMP has adopted a series of best management practices (BMPs) (Appendix F) that are designed to prevent or mitigate the effects of compaction. Additional mitigating measures are employed on a site by site basis to reduce compaction and the subsequent productivity losses, soil erosion, siltation, and increased peak flows. Productivity losses due to soil compaction will be limited to 5 percent or less where ground based equipment is employed.

**Comment:** The BLM should reduce or eliminate broadcast burning because burning reduces site productivity, increases erosion, kills small trees, reduces mycorrhizae, and damages adjacent timber lands.

**Response:** Broadcast burning is used for several purposes including providing planting sites for seedlings, controlling competing vegetation, and to reduce the risk of wildfire. Logging slash, when left untreated, can burn very intensely under wildfire conditions. Best management practices (BMPs) have been used since the 1980s, to reduce the impacts on site productivity due to broadcast burning. Refer to the appendices for current BMPs on broadcast burning. Alternatives to broadcast burning such as hand piling and burning, under burning, logging and scattering of limbs, and cutting of planting holes in slash are also used where feasible. Broadcast burning is one of several tools used for site preparation and will continue in the future. However, broadcast burning levels will decrease due to changes in harvest practices and other resource management objectives and constraints.

**Comment:** Protective standards for potential landslide areas have not been described. Provide information regarding slope stability which is needed for, among other things, the location of waste disposal sites.

**Response:** BLM's intensive timber production capability classification (TPCC) inventory, classifies areas based on soil and site susceptibility to degradation from timber management activities. Fragile soil areas were identified at two degrees of susceptibility to management activities. One was the identification of areas where management activities would result in detrimental impacts to soil/site productivity and/or potential off-site impacts. An example of this is the TPCC category, FGNW identified the areas of potential landsliding that could enter waterways. These sites were designated as "nonsuitable woodlands" and will be managed to protect and enhance their non-timber values. The second grouping of fragile sites is the "fragile suitable commercial forest land". These areas have been identified to be fully capable of timber management without site deterioration or off site impacts when Best Management Practices (See Appendix F) are used to protect and mitigate impacts from management activities. During site-specific planning, in addition, on-site investigations are conducted on these lands so we can avoid areas subject to landslides or provide adequate protection to limit their number and size.

**Comment:** Clearcutting causes soil destruction and productivity losses.

**Response:** Most sites that are prone to landsliding or surface erosion have been identified by the TPCC inventory. Others will be identified during site-specific planning. Some of these sites, "fragile nonsuitable woodland", are not planned for harvest. The remainder of these sites have been identified as fragile and require special restrictions or mitigation measures to avoid unacceptable soil impacts and productivity loss. Using management direction for the PRMP in Chapter 2 and best management practices (BMPs) will minimize soil destruction and productivity losses. In addition, under PRMP management regimes, areas scheduled for harvest will have an average of at least 6-10 green trees per acre retained after harvesting activities have been completed.

Retention of snags and green trees on the completion of harvest operations will provide future large woody debris to assist in maintaining soil productivity.

**Comment:** FORCYTE-II and other ecological models should be applied to a broad range of potential management prescriptions to reduce risk of long term site degradation. These models and models of physical properties, such as erosion, should be employed in a realistic test of timberland suitability.

**Response:** The suitability of forest land for timber management was determined through the TPCC inventory. The Forcyte model is not calibrated for the hot and dry sites of southwestern Oregon and no specific ecological model exists which was designed to examine trend in site productivity under management by different silvicultural systems for such sites. We utilized the research literature and available stand models to examine the probable effects of management practices and rotation lengths on site productivity and resource sustainability. Analysis of structural and functional ecosystem diversity, floristic composition, and down wood for each alternative, and the relationships which exist between rotation lengths and site productivity were utilized in the design of the PRMP. An analysis of the probable effects of the different alternatives on site productivity and long term timber yield sustainability is found in Chapter 4, Effects on Timber Resources.

**Comment:** Fragile soil areas should be inventoried. Fragile Soil areas classified as suitable commercial forestland should not be allocated for timber production because of undue soil degradation and stream siltation.

**Response:** A timber production capability classification (TPCC) intensive inventory (TPCC) has been completed which classified land based on soil and site susceptibility to erosion, landsliding, or nutrient depletion from timber management activities. Two categories of fragile soils were identified.

1) Fragile soils: most likely result in the loss of soil productivity or water quality degradation, were designated as nonsuitable woodlands, and will be managed to protect or enhance their nontimber values.

2) Less fragile soils: were deemed capable of being managed for timber without site deterioration or off-site impacts when best management practices (BMPs) are employed. On-site investigations are conducted to determine appropriate BMPs and mitigating measures such as maintaining vegetation, buttressing, endhauling excavated material, or installing drainage structures. Unstable areas are avoided and/or excluded from timber harvest.

**Comment:** Why are tractors allowed on slopes up to 35 percent and horses only allowed on slopes up to 20 percent when tractors cause more soil damage than horses?

**Response:** The 20 percent slope restriction is placed on horses because it is difficult for horses to negotiate slopes greater than 20 percent when yarding logs. Tractors are allowed on slopes to 35 percent because most of detrimental soil effects of soil compaction and erosion can be ameliorated through soil tillage and the construction of waterbars to divert water from skid trails. On slopes greater than 35 percent, it becomes more difficult or impractical to reduce compaction and erosion.

**Comment:** Why doesn't one of the alternatives in Table S-1 display the acreages in Table 3-S-1 and 3-S-2 that are excluded from harvest or have harvest restrictions respectively?

**Response:** The 33,433 acres shown on Table 3-S-1 are excluded from harvest under all alternatives. A portion of the more fragile suitable commercial forestland category (144,000 acres) is either excluded from harvest or harvest activities are limited in Alternatives D, E, and the PRMP.

**Comment:** What are productivity losses in regard to soil?

## Appendix V

- Response:** Productivity losses are the losses in the vegetative growth potential for a site due to loss of soil nutrients, organic matter, available water, or other site characteristics.
- Comment:** How did the Medford District determine reductions in the allowable sale quantity (ASQ) due to soil compaction?
- Response:** The reductions in PSQ due to soil compaction were determined on a sustained yield unit basis by averaging the percentage of acres that had been harvested by tractor since 1986. It was assumed that 12 percent of the tractor harvested acres were compacted which is the current guideline for reducing compaction when utilizing designated skid trails. Research has shown that productivity would be reduced approximately 40 percent on skid trails. Multiplying the percentage of acres tractor yarded by the percentage of area in skid trails by 40 percent is the loss in productivity anticipated due to soil compaction.
- Comment:** Adequate nutrients are available for plant growth below ground in tree roots and are unaffected by logging and burning. Burning actually transforms the nitrogen into a soluble form readily assimilated by tree seedlings.
- Response:** Much of a tree's biomass is below ground, however, the litter made up of needles, leaves, and twigs has relatively high concentrations of nitrogen and other nutrients compared to large woody debris. When the litter is burned, much of the nitrogen is volatilized or is leached into the ground and not available to plants. However, when litter is left to decompose slowly, it is a continuous source of nutrients. The productivity of the forests of Europe and Asia has been reduced due to over utilization of the above ground woody components.
- Comment:** Current BLM forest practices give too little attention to the quality and maintenance of forest soils. The results of management activities will render the soil no longer suitable or sustainable.
- Response:** The District utilizes several best management practices (BMPs) on a site specific basis to maintain the productivity potential of forest soils. Some examples include achieving "cool" burns, using alternatives to broadcast burning such as hand piling or cutting planting holes in logging slash, leaving standing trees, snags and logs, and designating skid roads and tilling them after harvest.
- Comment:** What specific standards are established for road building, erosion control, and landslide identification and stabilization?
- Response:** There are several standards that are applied to road construction based on the anticipated use of the road, the terrain the road traverses, and the resource values involved. BMPs are employed to minimize erosion and landsliding and are based on characteristics such as steepness of slope, soil type, proximity to streams, susceptibility to landsliding, etc. Landslides are stabilized by such measures as seeding to grasses, planting shrubs and trees, buttressing with large rocks, and diverting water away from the landslide.
- Comment:** The BLM must investigate the effects of past and present management regimes on soil health prior to implementing the management plan.
- Response:** The District has conducted a formal soil monitoring plan since the monitoring handbook was published in 1986. However, informal reviews have been conducted on the district on a project basis since the first soil scientist was hired in 1969. The District acknowledges that additional information should be gathered through research and monitoring to quantify the effects of management activities on soil health.
- Comment:** Design and implement BMPs that address the needs of each soil type and its biome and monitor for effectiveness.

- Response:** Best management practices are specific to soil types or a group of soils that have similar characteristics and are designed to ameliorate the adverse effects of management activities. A sample of the soil types that could be adversely affected by a specific practice is monitored.
- Comment:** Establish and maintain baseline information from intact, unmanaged areas representing the various soil types and seral stages throughout the district to assess the natural rates of erosion and soil development. Determine what management activities reduce beneficial organism populations and how reduced populations affect productivity. Develop a risk factor to enhance protection for long term productivity; the more site-specific the information the lower the risk, thus allowing greater management options.
- Response:** Because of the scope of the proposal, it should be considered as a research project.
- Comment:** How are threshold levels set for soil compaction, surface erosion, and landsliding?
- Response:** Threshold levels are established in the monitoring handbook based on research findings and/or the effects anticipated from a prudent operation. Representative areas on soils that are considered most susceptible to a particular management activity such as tractor yarding are examined to see if threshold levels have been exceeded.
- Comment:** Map 3-WA-3, fragile soils and frost prone areas, shows two soil types but there is no text discussing them.
- Response:** The two fragile soil types shown on the map are the granitic/schist soils and the pyroclastic soils. Granitic/schist soils are considered fragile because of high surface erosion potential. Pyroclastic soils are considered fragile because of susceptibility to slumping.
- Comment:** Jetboats need to be added as an activity that cause erosion.
- Response:** This issue is being addressed in the updated Rogue River Management Plan.
- Comment:** The Draft RMP boldly, although unconvincingly states, "The allowable sale quantity (ASQ) is projected at sustainable levels for all alternatives so no differences exist in short and long term timber harvest levels", (Chapter 4, pp., 4-109). There are contradictory statements on this issue throughout the document, for example, "The extent to which long term soil productivity is affected by management activities is not precisely known because of the site variables involved and the limited investigations that have taken place", (Chapter 4, pp. 4-10).
- Response:** The sustainability of timber volume production is estimated in the TRIM\*PLUS model based on the application of silvicultural systems and best management practices which are designed to protect site productivity while being consistent with the objectives of each alternative. While the risks to long term site and ecosystem productivity inherent in different management options cannot be quantified, Chapter 4, (Draft RMP) discusses the relative risks to site productivity of the silvicultural strategies used in the different alternatives.

## **Water Resources**

- Comment:** Establish riparian management areas (RMAs) of sufficient width to achieve restoration on streams in poor condition. Place a high priority on restoration in these watersheds and include the State and other interest groups in restoration plans.
- Response:** Riparian reserve widths of Alternative 9 of the SEIS have been applied to BLM-administered lands by the FSEIS ROD and have been incorporated into the PRMP. The riparian reserve widths may be modified after watershed analysis which will consider factors that include stream condition. Review and guidance for possible modifications of riparian reserves would be coordi-



nated through the Regional Ecosystem Office. Restoration will be based on watershed analysis and planning. Watershed analysis will also be used to identify and prioritize potential cooperative projects involving various landowners. Additional information on restoration can be found in the SEIS Appendix A: FEMAT, Chapter V Appendix J, and Appendix B6: Aquatic Conservation Strategy.

Comment: The Scientific Panel has determined that "no-cut" buffers of at least 50 feet are needed to protect intermittent streams with unstable soils.

Response: The PRMP incorporates such buffers in riparian reserves (RRs) which will include unstable and potentially unstable areas if they are not protected by timber production capability classification (TPCC) exclusion.

Comment: The relegation of first and second order streams to a lower level of protection than higher stream orders is inconsistent with the Oregon Water Quality Standards and with EPA's Regional Riparian Management Policy.

Response: The PRMP reflects the characteristic that larger stream orders generally have wider riparian zones and provide greater aquatic and terrestrial wildlife habitat than smaller stream orders.

Comment: Intermittent streams should be managed according to specific standards. Intermittent and ephemeral streams are treated no differently than any other forest area in the plans, yet they are major sources of landslides and debris flows and serve as critical habitats for amphibians.

Response: Management direction for intermittent and ephemeral streams has been derived from the FSEIS and incorporated into the PRMP. In addition, a vast majority of the unstable lands which contain these streams of concern have been excluded from timber management as unsuitable woodlands in the TPCC.

Comment: BMPs listed in the plan contain few measurable standards. BMP language should include conditions for which BMPs are applicable.

Response: BMPs will be prescribed and implemented based upon site specific conditions and requirements. BMPs will be monitored and evaluated and modified as necessary through an iterative process to meet water quality criteria and other resource management objectives.

Comment: The 1988 Oregon Statewide Assessment of Nonpoint Sources of Water Pollution (NPS Assessment Report) should be used in conjunction with Oregon's 1992 Water Quality Status Assessment (305(b)) Report, and other data, to establish:

1. Desired future condition on a stream-by-stream basis
2. Criteria and priorities for cumulative effects analysis
3. Priorities for water quality monitoring programs
4. Criteria and priorities for watershed level activity plans
5. Priorities for watershed rehabilitation programs
6. BMPs and watershed harvest deferrals

Response: We agree. These items will be established during plan implementation.

Comment: The EIS should not rely solely on the application of BMPs to satisfy the Clean Water Act. Discuss the effectiveness of BMPs.

- Response: It is recognized that BMPs are the primary mechanism to enable the achievement of water quality standards. BMPs are selected to achieve water quality standards. The iterative process that will be followed includes:
1. Design of BMPs based on site-specific conditions, technical, economic and institutional feasibility, and the water quality standards of those waters potentially impacted.
  2. Monitoring to ensure that practices are correctly designed and applied.
  3. Monitoring to determine:
    - a. The effectiveness of practices in meeting water quality standards.
    - b. The appropriateness of water quality criteria in reasonably assuring protection of beneficial uses.
  4. Adjustment of BMPs when it is found that water quality standards are not being protected to a desired level and/or possible adjustment of water quality standards based on considerations in 40 CFR 131.
- Comment: Include a BMP outlining specific parameters applicable to project-specific cumulative watershed effects analysis.
- Response: A cumulative watershed effects BMP has been incorporated into the PRMP and considers applicable beneficial uses, NPS Assessment and 305(b) reported conditions, monitoring and inventory data. When new methods of analysis are developed and validated they will be incorporated.
- Comment: Include a BMP with a commitment to activity deferrals when the cumulative effects analysis identifies probable beneficial use impairment. Include a BMP outlining a more conservative site-specific project planning approach when cumulative watershed effects analysis tools are not available, are under development, or have not been validated.
- Response: A BMP has been incorporated into the PRMP to address activity deferral or mitigation of cumulative watershed effects where impacts to beneficial uses are probable.
- Comment: BLM should not allow discretionary mining, grazing and other discretionary activities which would increase temperatures over the long term in streams not meeting state standards for temperature.
- Response: Authorized management actions will be designed or regulated to comply with applicable water quality criteria for the protection of identified beneficial uses and the SEIS Aquatic Conservation Strategy.
- Comment: Acknowledge the limits on the availability of surface water and address surface water quality problems.
- Response: Current departmental policy requires that we follow State requirements for the acquisition of all necessary water rights. Where surface water is limited in availability, we will pursue acquisition of water rights based upon the most current Departmental policy. Surface water quality problems as identified in the Oregon Nonpoint Assessment Report and the 1992 Water Quality Assessment (305 (b)) Report and/or district inventories are described in Chapter 3 of the Draft RMP/EIS.
- Comment: Describe watershed improvement and stream restoration activities which increase low season flow.

## Appendix V

- Response:** Implementation of riparian enhancement projects which enhance the potential for bank storage and slow release through establishment of proper function riparian systems and mitigation of existing compaction through decommissioning of roads or other compacted land surfaces to restore slope hydrological functions, will improve flood plain and upland hydrologic functions to enhance low season flow.
- Comment:** Set watershed impact standards, including maximum soil compaction, erosion rates, equivalent clearcut acres, and relative percentage of seral stages.
- Response:** Across the board watershed prescriptions are inappropriate. Prescriptions for management activities within individual watersheds will be based upon watershed analysis, application of BMPs and assessment of cumulative watershed effects, considering watershed specific soils, geology, inherent channel stability, beneficial uses to be protected, and other relevant site specific characteristics.
- Comment:** Watersheds should be classified and prioritized according to current functional or ecological conditions and importance for maintaining viable wildlife populations.
- Response:** Although BLM's forest inventory data provides some information on overall ecological or functional condition, this information cannot be disaggregated by watershed and remain statistically valid. Data on intermingled private lands is even less useful. We are currently implementing a riparian inventory to assess functional condition of stream reaches and riparian zones.
- Comment:** Watershed-specific standards should be developed in cooperation with adjacent lands.
- Response:** Cooperation with other parties may often be an appropriate way to implement RMP decisions most effectively, and their involvement will be encouraged. It is not appropriate, however, to make RMP implementation dependent on the cooperation of other landowners.
- Comment:** Watershed concerns suggest that road culvert design standards should be based on 50-year peakflow, not 25-year.
- Response:** Road culvert standards have been revised to require that culverts be designed to accommodate at least the 100-year flood. This conforms the PRMP to the standards and guidelines attached to the FSEIS ROD.
- Comment:** The goal for watershed management in watersheds providing surface water to public systems serving municipalities should be restated to assure the needs of the users are addressed and to protect comprehensive water quality.
- Response:** Watersheds providing surface water for domestic uses will be managed to meet or exceed applicable water quality requirements established through Oregon Department of Environmental Quality.
- Comment:** Display severely impaired streams identified by DEQ's 1988 Oregon Statewide Assessment of Nonpoint Sources of Water Pollution within analytical watersheds.
- Response:** Waterbodies with serious nonpoint source pollution problems are listed by analytical watershed in Appendix 3-WA-8, Draft RMP.
- Comment:** DEQ's 1988 non-point source report identified many stream segments in the district that have serious non-point source pollution problems caused by forest practices. The DEIS should have updated that report with more recent information. What is BLM doing about the problems?
- Response:** The DEQ's Nonpoint Source Assessment report was a collaborative effort undertaken by many agencies and groups within the State. BLM District personnel played an integral role in providing the information contained in the report. We, in cooperation with Oregon DEQ, are currently in the



process of systematically updating the Assessment Report. As a Designated Management Agency under the Clean Water Act we have worked and will continue to work closely with Oregon DEQ in improving and updating the assessment of stream segments on BLM-administered lands. Opportunities to mitigate existing NPS pollution sources will be an integral component of plan implementation.

**Comment:** Contact Oregon DEQ for their results of recent monitoring programs on streams.

**Response:** As a designated management agency we work closely with Oregon DEQ on all aspects of the Nonpoint Source Pollution Management Plan, including the sharing of data relevant to BLM-administered lands.

**Comment:** On-the-ground mapping of streams and stream orders, with clear identification of addressed intermittent and perennial streams is needed. The maps should also present 100-year flood plains and potentially hyporheic zones.

**Response:** Such mapping would be a massive undertaking and would have to cover not only BLM-administered lands, but also some of the intermingled lands in other ownerships. We currently have plans for revising and upgrading the current hydrography data themes for our GIS system to be completed concurrent with implementation of the plan. Currently, we do not have plans for mapping of perennial and intermittent stream 100-year flood plains or potential hyporheic zones.

**Comment:** Ten years is not an appropriate time frame for assessing effects to water quality. At a minimum, short term time frames should be analyzed under the shortest practicable period of time related to the implementation of specific activities.

**Response:** The RMP does not fix dates for the implementation of specific activities that might affect water quality. Most site-specific activities contemplated will occur two or more decades in the future, not during the life of the plan. Most that will occur during the life of the plan are not site-specifically established but their approximate location is projected through the 10-year timber management scenario. Shorter time frames can only be assessed as annual or sequential multi-year plans for site-specific treatments that are developed.

**Comment:** Roads cause most of the sedimentation in our rivers through surface erosion and landslides.

**Response:** The BLM will continue nonpoint source pollution management in accordance with the guidelines established by the Environmental Protection Agency (EPA) and the Oregon Department of Environmental Quality (DEQ). Appendix F contains a section on best management practices (BMPs) that will be used to help ensure compliance with these guidelines. Some of these practices include revegetating exposed soils, restricting access to natural surface roads, and paving or rockering permanent roads. Temporary roads will be put to bed or erosion control practices will be used to keep erosion to an insignificant level. In addition, management activities and new road construction will be designed, located, and constructed to avoid mass soil movement. As stated in the FSEIS ROD, Aquatic Conservation Strategy, watershed restoration will include control and prevention of road-related runoff and sediment production. The timber production capability Classification (TPCC) inventory has located areas with surface erosion and landslide limitations. This inventory data will be supplemented by an on-site investigation for each proposed management activity. In key watersheds identified in the FSEIS ROD, there will be no net increase in roads.

**Comment:** The plans for road building violate the Clean Water Act because new roads will contribute sediment to already impacted streams.

**Response:** BMPs in addition to the standards and guidelines attached to the FSEIS ROD, will be implemented to minimize potential impacts from both new and existing roads. In addition, opportunities will be identified through project planning to mitigate existing nonpoint sources of sediment.

## Appendix V

- Comment:** It is unclear how the watershed condition index (WCI) was generated, how it was used in planning, how it will be used in standards, guidelines and monitoring, and how it will be validated.
- Response:** The WCI has been dropped as analytical tool, because it was felt that requirements for watershed analysis in the FSEIS ROD would ultimately provide a more revealing assessment of the current watershed condition and provide the foundation for appropriate resource management decisions.
- Comment:** Explore the possibility that mining activities on BLM lands cause significant increases in the concentrations of metals in streams that supply public water systems.
- Response:** Mining activities on BLM-administered lands must comply with surface management regulations, State water quality criteria and best management practices to protect beneficial uses, such as public water supplies.
- Comment:** The people that BLM would be dosing by allowing pesticides, inerts, fertilizers and the like to get into drinking water supplies would be at risk.
- Response:** The buffering of streams when such products are used is part of the commitment to meet applicable water quality requirements established by the Oregon Department of Environmental Quality. Impacts of the use of herbicides and inert carriers have been fully addressed in BLM's Western Oregon - Management of Competing Vegetation EIS and Northwest Area Noxious Weed Control EIS.
- Comment:** Expand the discussion concerning the availability of groundwater and groundwater quality.
- Response:** Available information, mostly from other agencies, have been incorporated into the PRMP/FEIS. The extent of ground water supply effects is a site-specific issue and will be evaluated at the watershed or project level. Management prescriptions will be developed where groundwater quality might be potentially impacted.
- Comment:** The need for acquiring private landowners water rights and establishing instream rights should be stressed.
- Response:** Both of these proposals are beyond the scope of the PRMP because they are beyond BLM's authority.
- Comment:** Has a complete inventory been conducted to assess the Districts' wetland resources? How are significant impacts assessed? How will wetland inventories be conducted prior to timber harvests and other activities?
- Response:** We do not have inventories of all wetlands. Wetland inventories will be part of site-specific interdisciplinary inventories conducted prior to activities. The standards and guidelines attached to the FSEIS ROD identify required protection for these lands consistent with the Aquatic Conservation Strategy objectives.
- Comment:** Specifically name wetlands as features for which riparian management areas will be established and specifically identify wetlands that will be restored or enhanced.
- Response:** The PRMP/FEIS acknowledges wetlands and provides management direction for their protection. Opportunities to restore or enhance wetlands will be identified during implementation of the plan. Identification in the PRMP of specific wetlands to be restored or enhanced is beyond our current capability, lacking a complete inventory of these resources.

- Comment:** Acknowledge the need to coordinate and cooperate with public and private landowners to inventory wetlands, set criteria for significance for protection and restoration, and coordinate priorities to protect and restore public wetlands.
- Response:** Coordination and cooperation with other landowners may be an appropriate way to implement RMP decisions most effectively and their involvement will be encouraged. It is not appropriate, however, to make RMP implementation dependent on the cooperation of other landowners.
- Comment:** Provide a more thorough discussion of the potential effects on water yields and streamflow.
- Response:** Chapter 4 and Appendix 4-WA-1 discuss this topic.
- Comment:** The 1988 Oregon Statewide Assessment of Nonpoint Sources of Water Pollution (NPS Assessment Report) rates Bear Creek as having water quality conditions of severe (with data). Tributaries to Bear Creek are rated as either severe (e.g., Griffin Creek), or moderate (Coleman Creek, Willow Creek). The entire Bear Creek watershed could be rated as severely impacted. The pollution type resulting in impairments are: nutrients, low dissolved oxygen, pesticides, toxics, bacteria/viruses, sedimentation, low flow, insufficient stream structure, and excessive plant growths. Bear Creek watershed beneficial uses could be further impaired if further logging occurs in the watershed. Bear Creek is also a water quality limited stream and a total maximum daily load (TMDL) has been completed for ammonia, phosphorus, and chemical/biological oxygen demand. The PRMP/FEIS should provide a clearer basis for stating that there will be no contribution of nutrients to the Bear Creek from logging related activities.
- Timber harvest and road construction in these watersheds may be implemented without exceeding WCSs or beneficial use impairment. However, the primary methods for preventing standards impairment in the context of the PRMP are not developed sufficiently. The basis for our environmental concerns is that timber harvest and road construction may occur without an adequate watershed cumulative effects (WCE) analysis for site-specific projects, and that timber harvest deferrals may not occur in degraded streams, as an outcome of site-specific WCE analyses. We are also concerned that water quality monitoring plans are not sufficiently developed to verify that BMPs are preventing adverse effects.
- Response:** Forestry is not identified in the NPS Assessment Report as an associated land use for Bear Creek or its tributaries that are rated as having a severe nonpoint source problem.
- The use of herbicides, fire retardants, and fertilizers may, in some instances, produce small and short term increases in streamwater phosphorus concentrations. However, most published studies indicate most forest management activities have only limited, if any, effects on instream phosphorus levels (Salminen and Beschta 1991). Any management activities proposed for the Bear Creek watershed will be evaluated during the environmental assessment process to determine the potential for contribution of nutrients to Bear Creek or its tributaries.
- Comment:** Modify cumulative effects BMPs to include beneficial use impairment identified in the NPS Assessment Report and the 305(b) Report.
- Response:** The cumulative effects BMPs have been amended to address your concern.
- Comment:** The text on page 2-6 in the Draft RMP/EIS, identifies Bear Creek as water quality limited for biochemical oxygen demand and total phosphorus, and that BLM would coordinate with Oregon Department of Forestry in development of a Bear Creek nonpoint source water quality management program for forest management activities. This would include cooperation with Oregon Department of Forestry to implement a monitoring program that identifies phosphorus levels on forestland. There is no mention of this monitoring effort in Appendix 2-M-1, Monitoring Plan. The monitoring plan in the Final EIS should include types of surveys, location of sampling, parameters to be monitored, indicator species, budget, procedures for using data, or results in plan implementation in Bear Creek.

**Response:** The Oregon Department of Forestry (ODF) is the lead agency for developing a Bear Creek nonpoint source water quality management program for forest management activities. ODF conducted monitoring for phosphorus on forestland in Bear Creek during 1992. BLM assisted the monitoring effort by measuring streamflows periodically. To our knowledge, ODF is not planning any additional monitoring in Bear Creek.

**Comment:** The BLM has utilized a report prepared by the Department of Environmental Quality (DEQ) entitled, "1988 Oregon Statewide Assessment of Nonpoint Sources of Water Pollution", as a basis for describing existing water quality condition in basins with BLM-administered lands. The same source is used to describe existing stream channel and riparian conditions.

Much of the public testimony on the draft version of the 1988 assessment focused on the fact that the material was primarily subjective opinions often from only one source and with no effort to determine the accuracy of the input. The assessment was little more than an opinion poll used to generate a mandated response to EPA. The assessment only provides an initial listing of possible nonpoint source water quality problems.

DEQ representatives recognized this shortcoming and inserted a disclaimer onto every map in the 1988 report, noting that implementation of the site-specific NPS control programs may require further verification. To date, there has been little effort made by DEQ or any other agency, to scientifically assess the actual water quality conditions on the 27,000 miles of streams and rivers described in the report.

The reliance of the BLM in using this report to assess existing water quality, stream channel, and riparian conditions is not appropriate, since no site-specific assessments of stream conditions on BLM lands was completed. All conclusions and recommended management actions derived by the BLM from the DEQ report are invalid, since they are not based on a scientifically-objective assessment of stream conditions.

**Response:** The DEQ 1988 Nonpoint Source Assessment report is used along with other available information to describe existing water quality conditions in the planning area. It is not used to describe existing stream channel and riparian conditions. BLM District personnel were involved in providing information contained in the report. Appendix 3-WA-8, Draft RMP, lists waterbodies identified by DEQ, as having serious nonpoint source pollution problems. Pollution types are divided into two categories, data and observation, with a footnote explaining the source of information. The assessment maps in DEQ's report note that they should only be used for planning purposes, which is how they are used in BLM's Draft RMP/EIS planning process. It is appropriate for BLM to use all available information to describe the existing condition. Since water quality may be a reflection of upland conditions, it is not necessary to limit water quality information to site-specific assessments on BLM-administered lands.

**Comment:** Another example of targeted future conditions concerns temperature. With a desired condition of no significant (less than 2°F) change in the stream temperature from forest operations and research generated in Washington's timber, fish, and wildlife process, shading prescriptions (the surrogate for temperature) could be developed to support the beneficial use, fish. Research has shown that stream width is a critical variable for shading. The wider the stream, the less influence shade has on temperature. Thus, the necessary percentage of shade to be retained to maintain the beneficial use would decrease as stream width increases.

While most shade for streams comes from streamside vegetation including trees, ideally a site-specific approach could be applied to identify shade needs and retain vegetation which provides that shade. This approach would generate the desired future condition. A fixed width approach may under- or overachieve the targeted conditions. If objective information and research can quantitatively set the targets, the desired future condition approach would be applied to other riparian attributes.

- Response:** Many of the streams in the planning area exceed the State water quality standard for temperature and no increase in temperature is allowed. Streams are being managed for more than water temperature. Riparian reserve widths are a function of many riparian values, and prescribing a riparian reserve just to meet shading requirements would not be sufficient.
- Comment:** Fixed width riparian areas are not the product of an objective, targeted condition approach. Nature is not uniform. To retain the riparian widths specified in the PA, the BLM must demonstrate that the RMAs will satisfy but not grossly exceed the riparian needs.
- If a targeted, site-specific approach is administratively unworkable, one would logically conclude that regional variations would generate at least a regional approach to RMA width. One size does not fit all. If riparian widths are uniform throughout BLM lands, stream conditions will vary. Again, this suggests the need for at least a district or regional approach to riparian area designations.
- Response:** We agree that fixed riparian reserve widths are not always adequate to protect the associated riparian and water quality values. After completion of a watershed analysis, Riparian Reserve widths will be prescribed based on analysis of the critical hillslope, riparian channel process and features and contribution or all species intended to fit on-the-ground stream characteristics, riparian vegetation, soil, and topography in order to meet water and riparian objectives.
- Comment:** In the Draft RMP, the BLM provides for no timber harvest within RMAs as part of the timber management program. Some harvesting could occur for activities such as road construction, fish and wildlife enhancement, and yarding corridors. We can expect that the preferred alternative will generally result in "no touch" buffer areas along forest streams.
- Active management is necessary to achieve and maintain quality riparian areas. Riparian areas can also provide timber while addressing riparian needs. BLM should reassess their position to include riparian lands within the timber management program albeit at a lower level of production than upland areas.
- Response:** The Standards and Guidelines (TM-1, page C-31) attached to the FSEIS ROD prohibit timber harvest within riparian reserves. Riparian enhancement activities such as thinning hardwoods and reintroducing conifers will be permitted within riparian reserves if they meet the Aquatic Conservation Strategy objectives.
- Comment:** Private lands are managed to achieve a variety of goals, some similar and some dissimilar to BLM goals. Both BLM and private lands must and do address State and federal objectives concerning water quality and stream conditions. The suggestion that BLM must provide a higher level of protection to mitigate negative impacts from intermingled private lands is without merit. Since private lands provide adequate protection through the PRMP, this concept should be removed from all BLM management plans and replaced with a focus of
- addressing water quality and stream conditions impacts from BLM activities.
- Response:** The State's protection of water resources on public riparian lands recognizes that riparian areas on public lands have special values to the public. Whereas, private lands are managed primarily for economic output, public lands are established and managed to produce public benefits. The policy further states that private land management objectives warrant separate consideration.
- Comment:** It is unclear how the riparian zones in stream orders 1 and 2 are to be handled where the streams are not fish-bearing or perennial. A 75-foot buffer on each side of these intermittent drainages with minimum activity is excessive and will cause severe operational constraints in harvesting.
- Response:** The PRMP/FEIS clarifies the management of intermittent, nonfish-bearing streams.



## Appendix V

- Comment:** Why is there no riparian management objectives for Alternatives A and B? We can harvest timber and have riparian zone management. These two topics are always separated as shown by Table 2-20, on page 2-107, in the Draft RMP.
- Response:** RMA widths under Alternatives A and B would not meet the stream and riparian ecosystem objectives listed in Table 2-20.
- Comment:** The BLM discusses the risk of non-compliance with State of Oregon water quality degradation parameters. Alternatives NA, A, and B have the highest risks. Alternatives D and E have the lowest risks. Comparison of risks are misleading. Maybe Alternative A will increase sediment or turbidity in the stream in relation to Alternative E, but how damaging is this risk? How real is the risk? The significance of comparisons is only good information when the magnitude of the consequences is known.
- Response:** The relative degree of risk is a useful comparison tool and is appropriate for evaluating differences between alternatives.
- Comment:** The BLM has stated that water temperature will be maintained or reduced on all streams as an overall management objective. What will be the benchmarks? Warmer than optimum water temperatures can be affected by many factors, including low summer flows due to drought, channel configuration, stream orientation, water withdrawals, natural geology, and natural lack of streamside vegetation. Even under the PA and Alternatives C, D, and E, there may be violations of this goal due to lack of management. The hands off approach will not necessarily yield the most optimal results to streamside protection.
- Response:** Stream temperatures will be monitored. Implementation of the aquatic conservation strategy will ensure that BLM management activities maintain or reduce maximum summer stream temperatures.
- Comment:** In the discussion on water quality on page 4-15, in the Draft RMP, it is mentioned that timber harvest and soil compaction would increase the magnitude and frequency of peak flows in small watersheds, thereby degrading water quality. It seems that the BLM has mitigated this concern through its BMPs by reducing areas compacted during logging operations, and by dispersing harvest units to avoid large areas with little or no vegetation. It seems that with the silviculture systems utilized (more green-tree retention, leaving large wood debris, and vegetation) that these opened up areas will be small and dispersed, and will have minimal impacts on water quality, even with the riparian zones in line with the OFPA.
- Response:** Implementation of BMPs should mitigate affects of timber harvest and soil compaction on the magnitude and frequency of peak flows, however, adverse effects would not be totally eliminated. Cumulative effects from all management activities within a watershed could result in adverse effects to water quality through increases in magnitude and frequency of peak flows.
- Comment:** Comply with State Water Quality Standards.
- Response:** It is BLM's intention to comply with State Water Quality Standards. BMPs are recognized by DEQ as the primary mechanism to achieve water quality standards.
- Comment:** Identify plans for watershed restoration including streamside planting, erosion control, and road closures.
- Response:** Identification of watershed and stream enhancement projects will be based on watershed analysis.
- Comment:** Water use and water quality beneficial uses prescribed by the State of Oregon in the Umpqua, Rogue, and Klamath river basins are domestic water supply, rearing and spawning habitat for all salmonids, resident fish and aquatic life, water contact recreation, and aesthetics. Road building,



timber harvest, and livestock grazing are not included, and as documented in the Draft RMP, have severe adverse impacts to these beneficial uses. Therefore, road building, timber harvesting, and heavy livestock grazing in the river basin on BLM-administered lands is in direct conflict with the States beneficial uses. This is not following State administrative rules and therefore is illegal management by the BLM.

Also, all sub-watersheds in the Medford District need an analysis of beneficial uses before timber harvest or grazing is allowed to continue or increase. What are the State's beneficial uses for the Illinois River basin?

**Response:** Beneficial uses identified by DEQ are listed in Appendix 3-WA-1, Draft RMP, for all analytical watersheds including the Upper Illinois River. Water used for road building and timber harvest is considered industrial water supply, which is listed as a beneficial use. Livestock watering is also designated as a beneficial use.

**Comment:** How can you ensure water quality standards to maintain viable fish populations on BLM lands west of the Cascades?

**Response:** Management actions will be designed to comply with applicable water quality standards for the protection of identified beneficial uses. Water quality standards are selected by DEQ to protect the most sensitive of beneficial uses for each basin.

**Comment:** The BLM should be consistent with the Oregon Forest Practices Act when it comes to stream protection. We object to the BLM making decisions affecting riparian areas based on perceived problems on private lands.

**Response:** The BLM normally attempts to meet or exceed the Oregon Forest Practices Act, which was intended to protect water quality. Riparian reserves are designed to protect many resource values such as water quality, fish, and wildlife.

**Comment:** Herbicides may contaminate surface water.

**Response:** Buffering of surface water during herbicide application is intended to prevent water contamination. Impacts from herbicides have been fully addressed in BLM's Western Oregon Management of Competing Vegetation EIS.

**Comment:** DEQ's 1988 Nonpoint Source report identified many stream segments in the Medford District that have serious nonpoint source pollution problems that are caused by forest practices. The DEIS violated NEPA by not updating that report with more recent information. What areas are out of compliance now? What are the causes? What is the BLM doing about it, besides implementing BMPs that don't adequately protect water resources?

**Response:** Additional streams in the planning area identified by DEQ as "water quality limited" along with probable causes are included in Chapter 3, Water Resources.

BMPs will be prescribed and implemented based on site-specific conditions and requirements. BMPs will be monitored, evaluated, and modified as necessary through an iterative process to meet water quality criteria.

**Comment:** Appendix 3-18 of the Draft RMP states the Little Applegate has "serious nonpoint source pollution" (sediment high, nutrient loading) (Appendix 3-18, Draft RMP). I think your focus for the 1990s should be to correct this problem before extracting any more resources from a watershed that is admittedly known to have problems.

**Response:** The Little Applegate stream reach identified by DEQ as having serious nonpoint source pollution is from where it joins the Applegate River to where Yale Creek enters. Probable causes affecting this stream reach are fairly local and include removal of streamside vegetation, the road located

adjacent to the stream/riparian area, water withdrawal, and dredging of the channel.

BLM management actions in the Little Applegate watershed would be conducted in compliance with State Water Quality Standards.

Watershed restoration projects designed to reduce road erosion and sedimentation are scheduled for 1994 in the Little Applegate Watershed. BLM management actions in the Little Applegate watershed should be conducted in compliance with State Water Quality Standards.

**Comment:** Rather than defer additional watersheds, the BLM proposes to implement watershed management plans and/or fisheries management plans (page 2-58) that may never be implemented because of inadequate monitoring or enforcement budgets or timber allocation constraints.

**Response:** Deferred watersheds have existing high cumulative effects. The BMPs allow for deferring additional watersheds during the planning period if deemed necessary. Watershed protection is not dependent upon implementation of watershed or fisheries management plans. Watershed and fisheries management plans have been omitted in the PRMP because of the new requirement for watershed analysis.

**Comment:** The analysis in the impact statement and accompanying appendices suggests the specialist used what little data was available, rather than what was needed. (If field data was collected, qualitative/quantitative results were not summarized or incorporated into the analysis in a scientifically credible manner.) On a landscape level, the tactic of intentionally delaying critical cumulative effects analysis for small watersheds listed in Appendix 4-WA-4, will result in accelerated declines of anadromous fish, additional watershed deferrals in the next decade, faulty land allocations, and an inflated ASQ.

These impacts are especially likely, because a substantial portion of the watershed analysis is based on outdated and piecemeal cumulative effects data from 1988 DEQ reports, or previous environmental analyses for timber sales, and the BLM unlawfully limits analysis of stream habitat condition to BLM administered land only (Tables 3-F-1, 3-F-3, Appendices 4-F-4 and 4-WA-4).

**Response:** Small watersheds are listed in Appendix 4-WA-4, Draft RMP, to identify potential concentrations of timber harvest and/or road construction proposed under the 10-year timber scenarios. The scenarios were developed for analytical purposes only and do not reflect what would actually occur on the ground. This evaluation of the scenarios did not evaluate existing conditions, and a cumulative effects analysis would need to be conducted during activity planning for affected small watersheds. The evaluation of the 10-year timber scenario is not being carried forward into the PRMP/FEIS.

The watershed analysis utilized the most up-to-date information available including 1991 aerial photographs. The 1988 DEQ assessment report was used in conjunction with the watershed analysis to highlight streams known to have water quality problems.

**Comment:** It is impossible for either the decision-maker or the public to determine many of the subjective or relative terms such as "less than" or what the RMP means when it claims that:

"Under the PA, the probability of increased magnitude and frequency of peak flows, and subsequent water quality degradation in small watersheds would be moderate."

Failure to define "moderate" or many other general descriptive terms without an objective standard augments the underlying confusion and uncertainty of what the impacts of an Alternative will be relative to the survival of the ecosystem.

**Response:** These terms are used for comparison of the alternatives because we did not have quantifiable data.

- Comment: Table 4-WA-3 on page 4-23 in the Draft RMP, shows potential for increasing turbidity and sediment. Understanding the meaning of this is difficult without knowing or understanding what the magnitudes of the potential risks in relation to one another are.
- Response: Table 4-WA-3 shows a relative comparison between alternatives based on the previous discussions.
- Comment: Nowhere within the chapter on Environmental Consequences did I see any effects on transpiration rates or effects on infiltration and permeation rates within a watershed.
- Response: These are described in Appendix 4-WA-1, Draft RMP.
- Comment: The RMP proposals do not address how the erosion and silt buildup in our streams and creeks will affect water quality within the next 10 years. The DEQ and EPA need to be addressed in the PRMP.
- Response: Appendix 4-WA-1, Draft RMP, addresses effects of sediment on water quality and beneficial uses. DEQ is mentioned in Chapters 2 and 3. EPA has delegated authority to implement the Clean Water Act in Oregon to the DEQ.
- Comment: On page 3-20 of the Draft RMP, it states that water temperature of certain streams exceed water quality criteria. Let's look at what causes temperature increases and some potential solutions: 1) lack of flow - Solution: reduce impact on springs, improve springs; 2) water withdrawals - Solution: make recommendations to water regulating agencies to conserve water; 3) channel widening - possibly affected by sedimentation which can be mitigated; and 4) lack of streamside vegetation - Solution: increase riparian zone protection.
- Response: These potential solutions for reducing elevated temperatures will be considered and evaluated during watershed analysis and project level planning.
- Comment: In the Water Quantity section, Draft RMP, it states that the federal government's allowing Oregon to control federal waters (which probably include most waters of the U.S., according to the constitution) has constrained critical BLM activities. The public should know what these situations are. Please explain this.
- Response: A revision to the Water Quantity section in Chapter 3, Water Resources, clarifies the water rights issue.
- Comment: TELAV recommends that the BLM incorporate into the Proposed RMP, a plan to rehabilitate the Little Applegate River ecosystem which must include private and Rogue River National Forest (RRNF) lands. The Draft RMP indicated the Little Applegate River has serious nonpoint pollution problems (Appendix 3-19, Draft RMP). The observations which led to this recognition were likely conducted before the Medco, and the Ashland Ranger District's Greely Timber Sale, which impacted granitic soils and increased the level of geologic hazard. The Draft RMP does not adequately treat the cumulative effects of these negative effects on the river ecosystem.
- Response: A preliminary watershed restoration assessment was prepared by the BLM and the Rogue River National Forest for the Little Applegate River watersheds. Restoration projects are scheduled for implementation in 1994. The Little Applegate River will be included in the plan developed for the Applegate adaptive management area.
- Comment: What criteria determined the selection of priority watersheds for coordinated watershed management plans?
- Response: The requirement for watershed analysis has eliminated the need for developing watershed management plans.

Comment: Current concern and interest, when combined with some excellent opportunities for rehabilitation, make the Jenny Creek Basin an ideal watershed in which to advance the kind of change that will become increasingly necessary. Aspects which should be included in such a model watershed plan include:

An emphasis on restoring process, rather than simply structure. For example, rehabilitation and management which fosters vegetative and hydrologic recovery, both in the uplands and in the riparian zones, will not only be more cost-effective in the long-run, but will be most likely to accommodate the complex ecological and habitat requirements of all native species. Thus, in the Jenny Creek basin, rehabilitation should focus upon functions, like the water storage capacity and infiltration rates of upland and floodplain soils, or upon the natural hydrologic placement of log weirs and boulders in the stream channel. In short, rehabilitation of Jenny Creek will mean watershed protection, and the effort of BLM and cooperators will be most wisely spent outside the stream channel.

Cooperative management. Efforts at rehabilitation by the BLM might be for naught if private timber harvesting continues to contribute to excessive adverse hydrologic impacts, or if diversion does not allow adequate flows, or if cattle consume or trample the emergent riparian vegetation. Cooperation, both within departments in the BLM as well as between agencies and landowners, will be critical for success.

True change. The cooperation mentioned above will also be necessary between levels of management within the BLM. The rehabilitation attempted by Medford District field personnel may be impossible to implement or may be made moot by decisions made at higher levels. Management which will sustain the crucial ecological processes and productivity of native ecosystems will need to be adjusted at all levels, and previous driving forces that limited true and necessary change (like the ASQ) must respond.

Response: PSQ is a result of the application of management objectives and systems to the forest. Maintenance or restoration of ecosystem process and ecological health is a objective of the PRMP.

Comment: We urge you to coordinate better water management, riparian, and stream habitat management plans with those coordinated plans already developed. For example, the Big Butte and Summit Prairie CRMPs have been developed for nearly 20 years, as well as many others. We suggest coordination, cooperation and communication with those parties involved before reinventing a new process and plan.

Response: We agree.

Comment: At least two analytical watersheds are divided between the Medford and Lakeview Districts. This issue is not addressed in the Draft RMP. How will cumulative effects be addressed if study and special considerations are not coordinated between the two Districts? Our special concern is the Jenny Creek watershed. How will management be coordinated between districts to assure effective management of these watersheds? We request that a similar approach to inventory and methodology be used in both resource areas so the data can receive effective inter-district coordination.

We specifically ask that an allotment by allotment inventory of grazing administration (AUMS), other forage demands, identified resource conflicts/concerns, and management opportunities be compiled for all allotments within our area of concern, and that a corresponding Table documenting the current allotment AMP status, and current allotment boundary map to be developed.

Response: Jenny Creek is the only analytical watershed that is divided between Medford and Lakeview Districts. Watershed analysis for Jenny Creek should address the concerns identified. Grazing issues such as administration, forage, allotment status, and allotment location can be located in either the EIS (1984) or the latest Range Program Summary (1990).

- Comment:** Appendix 2, Draft RMP, should be modified to include prohibition of yarding in RMAs under any circumstances, slash in streams, and allow landing sites closer than 150 feet. Tractor operations should be restricted to slopes of 15 percent or less. On steeper slopes, helicopter or horse operations should be used. The RMP should incorporate plans to rehabilitate streams that are currently incapable of sustaining fish because of previous poor practices.
- Response:** Although yarding through riparian reserves is generally not desirable, it may provide a means to reduce overall impacts to a site. For example, yarding through a riparian reserve to access timber on the opposite side may decrease total miles of road to be built. Logging slash in streams is detrimental, only if it results in plugging of culverts. Landing sites will be located to minimize water quality degradation. Generally, this could be accomplished by locating them at least 50 feet away from riparian reserves.
- Tractors are allowed on slopes up to 35 percent because detrimental effects such as soil compaction and erosion can be ameliorated through soil tillage and the construction of waterbars. Amelioration on slopes greater than 35 percent is more difficult or impractical. Stream rehabilitation efforts will be identified as part of the district's watershed restoration program.
- Comment:** Control watersheds, particularly those including lower-gradient stream segments of high productivity potential, need to be incorporated in the BLM management and monitoring. Assessments of cumulative impacts and land-use habitat relationships require adequate benchmarks. Few suitable watersheds remain due to the combined BLM and private activities, emphasizing the need for the protection of the remaining roadless and low road density watersheds, and the rehabilitation of large, impacted watersheds.
- Response:** Four control watersheds are identified in Chapter 2.
- Comment:** Livestock-related parameters should be included in the Water Quality Compliance Monitoring (pp. 2-62). Medford's Grazing DEIS noted fecal coliform water quality concerns (pp. 38), yet this EIS shows no evidence of appropriate water monitoring. The Grazing EIS assured the public "Water quality monitoring will be initiated in accordance with BLM policies and the Federal Clean Water Act (pp. 9)". Water monitoring for livestock-related degradation is needed now.
- Response:** Best management practices (BMPs) for livestock grazing are identified in Appendix 2-WA-1, Draft RMP. Information on water monitoring for grazing may be found in the Medford District Rangeland Monitoring and Evaluation Plan, Appendix D, Draft RMP.
- Comment:** Adequate watershed monitoring is needed to document changes where conditions and trends are unfavorable. Forty (40) of the 70 Ashland resource area watersheds are nearly out of compliance now and it is expected all will be noncompliant by the year 2000.
- Response:** We recognize that monitoring is necessary to document changes in watershed condition. Monitoring for water resources is identified in the Draft RMP/EIS, and the PRMP reflects changes based on reevaluation and public comments.
- Comment:** I approve of your "opportunity" to designate undisturbed watersheds as water quality monitoring areas. Who would monitor and for what parameters?
- What does the designation "analytical watershed" and "watershed deferred from harvest" mean exactly?
- Response:** Water monitoring within undisturbed watersheds will be conducted by the BLM. Parameters to be monitored will be determined in a monitoring plan.
- Analytical watersheds are major watersheds within river basins used for planning purposes to analyze cumulative effects.



During the planning period, deferred areas will be excluded from management activities that would result in increased cumulative effects. The deferred areas will be reevaluated during the next 5 or 10 years to determine appropriate management.

**Comment:** The Draft RMP (pages 3-16 and 3-17) does not identify the surface/subsurface watersheds of Ginger Spring, the drinking water source for the town of Butte Falls.

**Response:** The community watershed map in the Draft RMP/EIS only reflects community watersheds with surface water source. Drinking water for the town of Butte Falls is identified by Oregon State Health Division as a ground water source.

Appendix 3-WA-5, Draft RMP, shows a map of the Ginger Spring watershed for the town of Butte Falls.

**Comment:** Existing clearcuts have degraded water quality and watersheds. Our streams run muddy after rains and the Butte Falls municipal watershed has been reduced to 30 percent forest cover. There are no actions planned that would provide permanent protection for watersheds. New jobs that harvest special forest recreation, herbs, pharmaceuticals, and other nature-responsible activities are acceptable, such as salvage logging in permanently protected watersheds.

**Response:** As stated in Chapter 3 of the Draft RMP/EIS, BLM is working with the town of Butte Falls to develop a municipal watershed agreement for protection of the towns' ground water source.

**Comment:** You state on page 2-52, Volume 1 of the Draft RMP, that a coordinated watershed management plan would be prepared to facilitate better watershed, riparian, and stream management for Wagner Creek, but that has not been accomplished at this time, even though the proposed Arrastra Creek Timber Sale for 1993 is in the Wagner Creek watershed and requires such a coordinated watershed management plan. Wagner Creek has been excluded as an analytical watershed, even though it's part of a community water system and the areas administered by BLM accounts for about 16 percent of that watershed. Recent experience with private logging shows us that increased turbidity in Wagner Creek adversely affects a commercial nursery on Wagner Creek, as well as the water supply of the city of Talent.

**Response:** A watershed analysis and community watershed management plan for Wagner Creek will be prepared as part of implementation of the PRMP. Wagner Creek is a tributary to Bear Creek, which is identified as an analytical watershed. Bear Creek was not included in the watershed analysis because BLM only manages 11 percent of the watershed.

**Comment:** A conservation plan should be worked out with BLM and Talent Irrigation District to keep Wagner Creek flowing all year if possible.

**Response:** BLM does not have authority or control over streamflows in Wagner Creek.

**Comment:** The 28,000 acres of watershed to be deferred for 10 years due to high cumulative effects to permit recovery, should be permanently removed from the timber base.

**Response:** Deferred areas will be reevaluated during the next 5-10 years to determine whether the areas have recovered sufficiently.

**Comment:** King Mountain Advocates commends the BLM for deferring logging in some 14 high-cumulative impact watersheds, but what were the criteria used for the determinations? Are there other likely candidates? Will the BLM compensate for neighboring land owner abuses, for example, in Farmer Gulch?

**Response:** Appendix 2-WA-2, Draft RMP, explains how the deferred areas were selected. Additional areas are identified for deferral in the PRMP. BLM analyzes cumulative effects, which includes actions on federal and non-federal land, during activity planning. Cumulative effects analysis for Farmer



Gulch was completed in August 1992. The analysis revealed that there is a high road-density. Recommendations for timber harvest are to avoid additional road construction and minimize soil compaction.

**Comment:** Once habitat for healthy salmon runs, the Upper Illinois has been recognized by the State of Oregon, as salmon habitat in serious decline. Yet, because the BLM only manages 11 percent of the area, the Draft RMP admits that a watershed condition index (WCI), does not exist for the Upper Illinois. The Rockydale Neighborhood Association finds this incredulous. The principle of "cumulative effects", a requisite for a major EIS such as the Draft RMP, seems to have been ignored in this case. The RNA calls for an inventory of the Upper Illinois before finalizing management plans for the watershed area. Without a proper inventory of the Upper Illinois, assumptions rather than fact may guide the management process. For example, in one section the Draft RMP states, "conditions of all streams in the Illinois River Basin is similar to others in the planning area". Statements like these are confusing, given the lack of a WCI for the watershed.

**Response:** The BLM will complete cumulative effects analyses on Upper Illinois tributaries as part of project level activity planning. Smaller watersheds are more appropriate for determining affects of management implementation on watershed conditions. We recognize the water resource concerns in the Illinois River basin and are working with the Illinois Basin Interest Group to conduct stream inventory and monitoring.

**Comment:** Why hasn't there been a watershed analysis of the Upper Wolf Creek and Lower Wolf Creek, as well as the junction of Lower Graves Creek? All the tributaries, which run off the Grave Creek, need to be analyzed before cumulative impact studies can be analyzed.

**Response:** Small watersheds in upper and lower Wolf Creek and many of the tributaries to Grave Creek have been analyzed. The remaining small watersheds will be analyzed during project level planning. Small watersheds in upper Grave Creek have been designated for deferral in the Proposed RMP. Other small watersheds in Grave Creek were found to have high levels of soil compaction from roads and tractor yarding.

**Comment:** Proposal "C" makes a biological corridor leading to the Rogue and Siskiyou areas, but does not mention how the RNA or special area proposals will protect the Wolf Creek watershed.

**Response:** Not allowing timber harvest or other surface disturbing activities within RNAs and designated ACECs will be beneficial to watershed condition.

**Comment:** The BLM needs to complete the studies of unanalyzed watersheds and consider them for a ten-year deferral to compensate for past BLM impacts and damage from adjacent private lands.

**Response:** All small watersheds suspected of having high cumulative effects have been analyzed. Additional areas are being designated for deferral in the PRMP. Best management practices allow managers the flexibility to defer watersheds during the planning period.

**Comment:** Can you tell us if the Evans Creek #6 watershed and stream flow will soon be analyzed or is it in a deferred status? Evans Creek, certainly the East Fork, also deserves and needs to be analyzed.

**Response:** Much of the Evans Creek watershed has been analyzed for cumulative effects. Three small watersheds in West Fork Evans Creek watershed and Spriggett Creek watershed in East Fork Evans Creek are designated for deferral in the Proposed RMP. Other small watersheds in East Fork Evans Creek do not have high cumulative effects. Management proposed for sensitive soils in this area should mitigate adverse impacts from future actions on BLM-administered lands.

**Comment:** The BLM is to be commended for recognizing the need to restore various watersheds and subwatersheds, however, much work needs to be done in this area. I live in the Evans Creek drainage, my subwatershed is Sykes Creek/May Creek. The cumulative effects of the 1987 fire,

private logging operations, BLM logging operations, and the drought have greatly stressed this area, which could use professional help. Please consider putting this subwatershed on your list for analysis.

**Response:** Analysis of the Sykes Creek/May Creek watersheds in February 1992, did not indicate high levels of cumulative effects. Observations of these streams over the past several winters have not shown excessive sedimentation. Areas burned in the 1987 fires have revegetated very well and are not considered to be in a high risk category.

**Comment:** Will the watersheds in the Cheney, Jackson, and Slate Creek areas, or have they been, officially analyzed by the District? Do we have any serious nonpoint source pollution problems, such as can be caused by clearcuts and logging roads? Is all of this declined flow due to drought, or is it due in part, from timber harvest or ground-based yarding? What kind of work does the BLM plan to do to help recovery in these areas, if anything? Has the BLM selected any of the above watersheds for a coordinated watershed management plan?

**Response:** Cheney and Jackson Creeks were analyzed in the Draft RMP/EIS. Slate Creek has not been analyzed. No nonpoint source pollution problems have been identified by DEQ for Cheney or Jackson creeks, however, Slate Creek has moderate water quality problems including turbidity, sediment, erosion, and low flow resulting from irrigation, harvest, road construction, and mining. Certainly the eight years of drought conditions has been a major factor in streamflow declines. Watershed analysis has eliminated the need for coordinated watershed management plans.

**Comment:** Rancheria Creek in the Butte Falls Resource Area has a high number of strong springs and there was good flow in the creek all through last summers dry period. Should this creek be analyzed and its high quality protected?

**Response:** The cumulative effects analysis for the Rancheria Creek watershed is partially completed at this time. The unfinished portion is administered by the Forest Service and we plan to get more information in the near future. Initial concern for this watershed compartment is reducing the amount of compacted acres. It is felt that best management practices and amelioration of some of the compaction (i.e., ripping skid trails and obliterating roads) would adequately address these impacts. Also some initial stream habitat inventory has begun and additional restoration projects may be forthcoming.

**Comment:** The Draft RMP has identified 14 severely damaged watersheds, ruined due to logging and road building on poor soils. The headwaters of Birdseye Creek are mentioned several times as one of these watersheds, yet this area was not deferred. Roaded to death by BLM and private, logged almost to extinction in the past 20-years, this watershed barely hangs in there. More amazingly, a 1987 fire consumed 3,500 acres of watershed. In 1992, 100 acres of the watershed perished to fire. In 1991, a salvage logging of over-stressed trees occurred and is still going on yet. Steadfastly, this area still remains in BLM's management activities.

**Response:** The headwaters of Birdseye Creek are identified in the Draft RMP/EIS, as having fragile soils formed from decomposed granitic parent material on steep slopes, not as having high cumulative effects due to past management. Vegetation in the area that was burned during the 1987 fire has nearly recovered. Future entries in this area will be subject to timber management restrictions for sensitive soils.

**Comment:** We support the decision in the preferred alternative to defer harvest in some watersheds due to "cumulative" impacts. Specifically, we support the deferral of Upper Keene Creek watershed, but we request the inclusion of Mill Creek and Lincoln Creek in this deferral for the same reasons.

**Response:** Neither Mill Creek nor Lincoln Creek watersheds are deferred because they have not been identified as having high cumulative effects. Both watersheds are included in an LSR, therefore, future impacts on watershed condition are expected to be low.

- Comment:** What criteria was used to determine which of the watersheds listed in Appendix 4-WA-4 should be deferred? How current was that data? Does the preferred alternative allow for deferral of others as they become more degraded? What steps are you taking to prevent the necessary deferral of more watersheds? We request that the PRMP/FEIS address how the BLM intends to assist in the recovery and restoration of these deferred watersheds.
- Response:** Areas deferred from management activities have high watershed cumulative effects. Watersheds in Appendix 4-WA-4, Draft RMP, are not proposed for deferral. They are listed because the ten-year timber scenario under one or more alternatives proposed large concentrations of timber harvest and/or road construction. The evaluation was intended to look at spatial distribution of the proposed timber harvest and road construction, existing condition was not considered.
- The BMPs include watershed deferral as a management option to mitigate water quality impacts in high risk watersheds.
- Analyzing watershed cumulative effects during project level activity planning and incorporating BMPs in project plans to meet water resource objectives should help prevent future deferrals. However, BLM does not have control over activities on non-BLM-administered land, and these actions may lead to deferral of management activities on BLM-administered land.
- If rehabilitation is deemed appropriate for the deferred areas, a management plan identifying opportunities for rehabilitation would be developed.
- Comment:** In light of the new Medco liquidation plans, we would like to recommend that all BLM harvesting be deferred in the areas between Highways 140 and 62, including Cobleigh Road. Since Medco will be providing timber to the industry, public lands do not need to become available.
- Response:** A portion of this area is designated for deferral in the PRMP. Watersheds will be analyzed or re-analyzed during project level planning to determine changes in watershed conditions resulting from management on non-BLM-administered land.
- Comment:** The Upper Antelope Creek watershed area has and "is" being cut very heavily by private industry. We believe the Anticlimax Sale is very marginal profit-wise and the increased roading in Deer Winter Range will only aggravate the problem. We would hope that the BLM will defer any plans to log this drainage for 10 years, when we all have time to understand the full implications of the forest practices being used "today".
- Response:** The Upper Antelope Creek watershed was analyzed for cumulative effects and it was determined that implementation of BMPs are adequate to mitigate adverse impacts to water quality. An updated analysis will be performed prior to future management actions.
- Comment:** Ginger Springs Municipal Watershed provides drinking water for the town of Butte Falls. This watershed has been overcut by private landowners and BLM would follow suit with new clearcuts in the Tokyo Ginger area. This watershed needs to be protected in the PRMP/FEIS.
- Recommendation: Ginger Springs Municipal Watershed needs to be designated as a deferred watershed, and all deferred watersheds need to be permanently removed for the timber base due to unacceptable cumulative impacts.
- Response:** Results of a cumulative effects analysis for the Ginger Springs Creek watershed indicate that site-specific mitigation measures will be adequate to prevent water quality degradation.
- Comment:** Clark Creek is an example of a watershed that should be deferred due to high impacts as indicated in the Environmental Assessment.
- Response:** We agree and have added Clark Creek watershed to the list of deferrals.

#### *Appendix V*

- Comment:** I support the deferment of Cold Creek and any other drainages to West Fork Evans Creek. Also consider Rock Creek and Salt Creek for deferment from road building and logging.
- Response:** Rock Creek and Salt Creek were analyzed for cumulative effects and do not need to be deferred. It is anticipated that proposed management for sensitive soils will provide adequate watershed protection.
- Comment:** I would like the BLM to defer the Sardine Creek watershed for the next 10 years. Before any more logging takes place in this watershed, it needs to be analyzed. Present and past logging, as well as the recent fire, make this imperative.
- Response:** Most of Sardine Creek has been analyzed for cumulative effects. Although portions of Sardine Creek were burned in the 1992 fire, it is anticipated that watershed mitigation measures will minimize watershed degradation resulting from management activities.
- Comment:** Is there such a coordinated plan for the Sardine Creek? I would also very much like to see a detailed watershed analysis done for these areas before determining how much more impact they can sustain. In addition, I would like to see the Wards Creek and Left Fork Sardine Creek watersheds officially deferred from harvesting and road building for the next ten years. This period is minimal in terms of the recovery time needed from the East Evans Creek fire, not to mention other recent activities.
- Response:** No coordinated watershed management plan has been prepared for Sardine Creek watershed. Cumulative effects analyses that included effects of the 1992 fire were completed for Ward Creek and the Left Fork of Sardine Creek watersheds.
- Watershed deferral is not necessary for these watersheds. Implementation of watershed mitigation measures, along with the vegetative recovery, will be adequate to minimize watershed degradation resulting from management activities.
- Comment:** I am delighted to hear the BLM has taken time to identify and "defer" in the 14 damaged subwatersheds. Thank you! It does appear that Humbug #19 is not "deferred" although it is assessed as damaged. I would very much insist and request that it be deferred immediately! It is obvious that it is suffering enormously from the drought in addition to the reckless logging practices.
- Response:** Results of the analysis in the Draft RMP for Humbug-Applegate representative watershed do not indicate there are high cumulative effects as a result of past management activities, and watershed deferral is not considered necessary at this time.
- Comment:** I would like to propose that the East Fork of Williams Creek watershed (which include Rock Creek, Pipe Fork, and Glade Fork) be designated as deferred watershed. Logging and road building have damaged this watershed on numerous occasions. It is a very fragile area and should be left without further disturbance.
- Response:** Analysis of East Fork Williams Creek watershed does not indicate that watershed deferral is needed.
- Comment:** I am a resident of the West Fork Williams Creek, which has been identified as a "representative". Defer logging in this watershed at the very least, because it has been so heavily damaged already. Has this sub-watershed been fully analyzed? Please complete the analysis before further devastation occurs!
- Response:** Results of the analysis in the Draft RMP for West Fork Williams Creek representative watershed do not indicate that high cumulative effects exist as a result of past management activities, and watershed deferral is not considered necessary at this time.

- Comment:** Extensive overcutting and roading have degraded Deer Creek and its tributaries. Deer Creek should be added to the watershed deferrals.
- Response:** Cumulative effects have been analyzed for a portion of the Deer Creek watershed. White Creek appears to have higher watershed impacts than other drainages within the Deer Creek watershed. White Creek is included with the watershed deferrals in the PRMP.
- Comment:** The Upper East Fork, East Fork, and Upper Illinois River should be deferred. This area has been heavily impacted by the Longwood Fire, salvage logging, and mining.
- Response:** Some small watersheds in the Upper Illinois watershed have been analyzed for cumulative effects during past timber sale planning. The remaining small watersheds will be analyzed during future planning. None of the watersheds analyzed have high cumulative effects, and therefore, no areas in the Upper Illinois watershed are designated for deferral.
- Comment:** The BLM should clearly disclose the cumulative watershed effects analysis procedure it proposes to use.
- Response:** The watershed cumulative effects analysis used for the Draft RMP/EIS is described in Chapter 3, Water Resources, Appendix U, Chapter 4, Water Resources and Appendix F of the PRMP/FEIS.
- Comment:** Consistency through coordination in implementation and monitoring are needed, not only within a district, but also between districts. The State recommends that BLM develop more comprehensive standards utilizing such expertise as, the Forest Service (Siuslaw National Forest), State Department of Forestry and others, in identifying (using GIS) and protecting potential landslide areas.
- Response:** Coordination in implementation and monitoring will continue between districts. Potential landslide areas were identified in the TPCC inventory. Potential landslide areas likely to result in the loss of soil productivity or water quality degradation are designated unsuitable woodlands, and are not available for timber harvest. Other surface disturbing activities on these areas will be prohibited unless adequately mitigated to protect water quality.
- Comment:** Where streams do not meet State water quality standards for temperature, BLM should not allow activities (e.g., grazing) that would increase temperatures over the long term.
- Response:** BLM's objective is to meet the Aquatic Conservation Strategy. Site-specific BMPs would be implemented to ensure this objective is met.
- Comment:** Temporary (one-season) temperature increases would be permissible for the following activities: restoring or improving riparian areas or in-stream habitat, stream bank protection, required transportation system crossings, harvest corridors, structures associated with putting water to beneficial use, or other essential activities, such as fire suppression, flood control, or administering BLM lands. Water temperature increases from these activities should be minimal and adequately monitored, especially for cumulative effects. Temporary disturbances should be scheduled when adverse effects to beneficial uses would be minimized.
- Response:** The minimization of adverse effects to the beneficial uses of water is one consideration in the scheduling of temporary stream disturbance caused by management activities.
- Comment:** BLM should evaluate future road design, construction and maintenance standards, to ensure protection of water quality. As noted in the Oregon State University response, adequate culvert sizes (consider 25 and 50 year flood) are necessary for draining runoff. Catastrophic road failures from poor road design and plugged culverts, can have a major impact on downstream channels, riparian area values, and fisheries resources. The Oregon Forest Practices rules are currently being revised to consider larger culvert sizes on private lands.



#### Appendix V

- Response:** We agree. A district road management plan will be prepared and will specifically address water quality. Road culvert standards have been revised to require that culverts be designed to accommodate at least the 100-year flood.
- Comment:** The Department of Environmental Quality (DEQ) has conducted intensive monitoring of water quality in several basins in western Oregon since publication of BLM's, "Analysis of the Management Situation". BLM is encouraged to contact DEQ for the results of these monitoring programs, especially on streams running through BLM lands. (Note DEQ comments in Appendix 2.)
- Response:** We requested and received water quality monitoring data from DEQ. Chapter 3, Water Resources in the PRMP, has been updated to reflect the additional monitoring data from DEQ.
- Comment:** District plans should address ways to conserve and reduce water consumption and soil compaction.
- Response:** Water conservation and reduced consumption techniques used in the district include evaluating the need for road dust abatement and use of dust palliatives other than water.
- Reduction of soil compaction will be accomplished by limiting new tractor skid roads to less than 12 percent of a harvest area, ripping skid roads, and ripping temporary spur roads.
- Comment:** In order to obtain more significant data from evaluation and monitoring, BLM should subdivide analytical watersheds greater than 10,000 acres into smaller, more manageable units.
- Response:** This is done for project level planning.
- Comment:** Management activities should be monitored in each watershed to determine the cumulative effects on water, soil, fish, wildlife, and other resources. It will be difficult to accurately monitor watersheds where BLM manages only a small portion of the land base. The State strongly encourages cooperation and communication between landowners in multiple ownership watersheds. Cooperative ventures should involve evaluation of watershed condition, land management planning, and watershed monitoring for protection of water supply, water quality, and fish and riparian-dependent wildlife. Monitoring of multiple ownership watersheds further would serve as a benchmark for comparison with other watersheds with greater BLM ownership.
- Response:** Cooperation with other parties may often be an appropriate way to implement PRMP decisions most effectively and their involvement will be encouraged. It is not appropriate, however, to make PRMP implementation dependent on the cooperation of other parties.
- Comment:** Pages 3-24 and 3-25 in the Draft RMP, specifically mention road location in Elk Creek as a cause of pollution. Why was Elk Creek left out of Appendix 3-WA-8?
- Response:** Appendix 3-WA-8, Draft RMP, lists waterbodies identified by DEQ as having serious nonpoint source pollution problems. DEQ identifies Elk Creek as having a moderate nonpoint source pollution problem.
- Comment:** The stirred and unearthed chemistry from freshly cut units creates a dynamic that has not been adequately addressed. The disturbed and displaced cation exchange media in the light, fine clays, easily transport in runoff, since they repel one another by having like negative charges. The natural hydrologic patterns are modified by the effects of skidding, slack-line yarding, roads and landings, especially within the riparian areas. Reducing the transport to streams, by leaving diversions and a forested buffer along the watercourse, may protect the fishery habitat, but does not address the chemical quality or toxicity of the water. High fingerling mortality from supposedly clear water draining from "properly logged" watersheds must be investigated carefully and thoroughly.



- Response: We are not aware of any literature addressing toxicity of streams resulting from timber harvest activities.
- Comment: We must address the primary water users and their needs: the aquatic macro/micro flora and fauna most susceptible to the chemical quality/quantity in the stream water. While we may monitor these aquatic life forms to determine water quality, we must assess their needs and manage for them to be met.
- Response: We acknowledge that more information is needed regarding the needs of aquatic species.
- Comment: The BLM must determine which watersheds are in fact out of compliance with State water quality regulations, rather than assume that all watersheds currently comply with the law. The agency must develop and implement methods for measuring potential violations of State water quality laws.
- Response: Streams not in compliance with State water quality regulations have been designated "water quality limited" by the Oregon Department of Environmental Quality. At the time of analysis for the Draft RMP, Bear Creek was the only stream in the planning area known to be water quality limited. DEQ has recently identified two additional streams in the planning area, Little Butte Creek and Evans Creek, as water quality limited. The PRMP/FEIS has been updated to reflect these changes.
- Comment: In July 1991, Oregon adopted narrative biocriteria as part of its WQS. The State is in the process of developing the implementation guidance for the biocriteria and is selecting appropriate reference sites in various ecoregions in the State. Once this framework is in place, the BLM should coordinate its monitoring locations and protocols to allow comparison with the reference site conditions. This is necessary in order to determine whether the WQS for protection of biological integrity of the waters are being met. Provisions for this coordination should be spelled out in the PRMP/FEIS. In addition, the State expects to adopt numeric biocriteria in 3-5 years. The BLM activities will be expected to meet these WQS once they are adopted.
- Response: Until reference sites have been selected by DEQ, it would be inappropriate to include provisions for coordination of reference monitoring sites in the Proposed RMP. It is likely that results from the on-going macroinvertebrate monitoring being conducted by BLM will aid DEQ in identifying appropriate reference sites.
- Comment: Forest Creek's flow has decreased nearly 60 percent since the Belle Sale. The drought is partially responsible of course, but the heavy timber cutting in the Mt. Isabelle drainage must also be blamed for a substantial part of this decrease. We urge you to adequately consider the cumulative impacts in any future plans you have for this watershed.
- Response: Cumulative impacts are considered during the environmental assessment process.
- Comment: The deferral of the Parsnip Lake watershed (and others) is applauded, but why only these and no other small watersheds? Field experience suggests that relief and restoration is due to the Parsnip area but that it is not alone. Corral, Beaver, Lincoln and Mill creeks, in fact the entire Jenny Creek watershed suffers from excessive cumulative impacts and deferment from road building and timber harvest is justifiable on watershed conditions concerns alone.
- Response: All small watersheds suspected of having high cumulative effects have been analyzed. Additional areas are designated for deferral in the PRMP. Jenny Creek is designated as a key watershed in the PRMP and parts are within a LSR. A watershed analysis will be prepared prior to conducting any management activities.
- Comment: The assumption that "standard design (mitigation) features described in Chapter 2 would be applied as described," is not supported by the monitoring reports. Headwaters' analysis of snag retention levels across the district, the BLM's failure to strictly enforce no-cut zones in riparian

buffers, and the high levels of sediment in many of the BLM-administered streams, all point to the fact that mitigation and BMPs do not always work. Unless the agency has ironclad mitigation practices, the money and the personnel to apply the practices, assuming that all mitigation measures will not only be implemented but will perform as expected is naive and misleading.

**Response:** Monitoring will be essential to ensure that BMPs are implemented and to determine their effectiveness.

**Comment:** According to the RMP, "activity on private land has contributed to detrimental cumulative effects" on water quality and fisheries in subwatershed where BLM land is surrounded by private land in a checker-board. The RMP suggests ownership consolidation, but that can't do it all. Watershed management must be coordinated among private and public agencies. When it comes to the interconnected areas of watersheds, if one section is protected while another abused, the system will continue to decline. BLM should take a leadership role and facilitate watershed management among the variety of involved parties.

**Response:** Hopefully, this ongoing effort can be satisfactorily accomplished through the watershed analysis process.

**Comment:** Federal and state agencies with major private landowners should establish cooperative plans identifying key problems and solutions and working together to address them. Populations of native species, the locations and characteristics of special habitats, identification of key areas for protection and rehabilitation, etc., should be gathered and considered jointly. This would benefit many interests, and with proper organization, could also create jobs in road obliteration and vegetative rehabilitation. Such watershed planning could help prevent disasters associated with endangered species listings and losses of stocks and species.

**Response:** Hopefully, this will be accomplished through watershed analysis plus more specific project level planning.

## Biological Diversity

**Comment:** Emphasis remains on single species recovery programs rather than on habitat protection and other measures that focus on maintaining biological diversity.

**Response:** The emphasis of the PRMP is dual, focusing on both. Emphasis on existing recovery programs must continue until a decision is made on the recovery status of species such as the peregrine falcon, Columbian white-tailed deer, and bald eagle. The USFWS currently focuses on single species recovery and until an official shift to habitat recovery is made, BLM'S land management must satisfy single species management requirements.

**Comment:** Old growth emphasis areas do not protect old growth ecosystems from logging roads, soil compaction and other threats to biological diversity.

**Response:** The PRMP substitutes late-successional reserves (LSRs) for old growth emphasis areas (OGEAs). Management assessments should be prepared for each large late-successional reserve (or group of smaller late-successional reserves) before habitat manipulation activities are designed and implemented.

**Comment:** Identify and examine expected future condition for biological diversity. Relate to the compositional, structural and functional attribute of ecosystems, and include a regional perspective.

**Response:** See revised Chapter 3, Biological Diversity, Current Condition, and Chapter 2, Biological Diversity, Objectives in the PRMP.

- Comment: Provide information on the current condition of ecosystems and their compositional, structural and functional attributes.
- Response: Information gleaned from existing inventories was used to develop the information displayed in the Biological Diversity section of chapter 3 in Forest Health sections of the Draft RMP. In the PRMP/FEIS, BLM used data from a Forest Service synthesis of available information about the pre-settlement characteristics of Pacific Northwest forests to compare current forest condition and function with the range of pre-settlement conditions. Ecosystem functions are statements about the ways in which ecosystem processes operate. These can sometimes be the subject of inventories, for instance, inventories describing the nesting success of spotted owls provide an indicator of one aspect of ecosystem function. Where possible, such statements of ecological function are shown in Chapter 3, Biological Diversity and Ecological Health, or other sections describing specific resources.
- More generally, ecosystem processes are implied from the presence of species, structures, and disturbance intervals known to be required for functions to occur. For instance, the retention of nitrogen fixing plants in young stands, the nitrogen fixation associated with lichens in large old trees, and microbial fixation of nitrogen in down wood results in processes occurring which maintain site productivity. If forest conditions are maintained within the range of natural variation which occurred before settlement began, and if species mixtures and structural complexity is retained, it is thought that ecological functions will be maintained.
- Comment: Express the amount of large woody debris (LWD) to be retained by size class, for example, logs at least 20 feet long and 25 inches in diameter at the large end.
- Response: We have adopted the FSEIS ROD standards. Pending development of models specific to plant associations and stand types, the interim guidelines consider only logs 20 (16) feet or longer and at least 20 (16) inches in diameter as relevant in this district.
- Comment: Permit the retention of LWD from the merchantable component if the unmerchantable component is absent.
- Response: Both merchantable and nonmerchantable down wood will be candidates for retention in meeting structural targets within the analytic landscape, however nonmerchantable wood will be utilized first in satisfying targets.
- Comment: Within 100-years of management under the Draft RMP, almost all large woody material will disappear in the GFMA's.
- Response: Because there are differences in the decay rate for down wood in different environments and because the contribution of down wood is usually periodic, related to root diseases, storm events and other disturbances, there will be variation in the amount and size of down wood which will exist in the forest for different structural (age) classes. For the PRMP, structural targets have been set as described in Chapter 2. Tables 4-BD-4, 5, 6, 7 and 8 show the amount of down wood which is expected to be present for specific age classes for each alternative.
- Comment: Include retention of target levels of dead-and-downed wood in timber sale contract stipulations.
- Response: Retention levels set forth in the plan objectives will be translated into contract stipulations.
- Comment: It is not possible to determine the proportion of mature stands that will be logged in the first decade.
- Response: "Harvest of mature stands will be based on the results of watershed analysis. Harvests will be planned so that at least 15 percent of federal forest lands in fifth field watersheds (20-200 square miles) will be in late-successional condition."

## Appendix V

- Comment:** The substitution of geographically diverse plantation stock for narrow, locally adapted families may increase diversity at the site level, but homogenizes the landscape and thus reduces overall diversity. Address the influence of BLM's tree improvement program at the species, ecosystem and landscape levels.
- Response:** We expect to reexamine our tree improvement program and the extent to which we use genetically improved stock, to assure that the genetic diversity of the forest is maintained at both the stand level and at the regional level. The tree improvement program appears to increase our ability to fit naturally evolved and adapted genotypes to forest sites, to maintain the genetic quality of forest stands and to be useful in increasing resistance of stands to global climate change.
- Management of the forest with or without tree improvement has the potential to change genetic diversity. Tree improvement assures genetic conservation of desired genotypes for use in meeting resource management objectives.
- Comment:** The final plan should better address seral stage diversity, the status of early seasonal stage, old growth seral stage, hardwood stands and structural diversity.
- Response:** These issues were analyzed and presented in Chapter 4. Objectives and Management Direction has been revised and are presented in Chapter 2.
- Comment:** The second lines in both sections of Table 4-BD-9 should be just like the first: if creating less old growth is moving away from the natural, then the early seral stages so created are also moving away, aren't they?
- Response:** In Table 4-BD-9, "Changes in Components of Biological Diversity by Alternative," "pluses" were assigned to components that were either improving (moving towards natural conditions) in condition or increasing in number. The narrative within the Draft RMP unfortunately did not say that and is somewhat confusing when compared to the Table. The narrative in the PRMP has been written to match the Table.
- Comment:** Doesn't Table 3-V-2, "Major Plant Groupings by Seral Stage" in the Draft RMP, overstate early and mid seral stages? Isn't much of those areas permanently in grass, brush, and scattered trees because of the dry climate and the soils? If the early seral stage is accurate, that would be an alarming amount of land.
- Response:** Seral stages are relevant to each major plant grouping. Early seral acres for the White oak-ponderosa pine/manzanita-wedgeleaf/grass grouping reflect the fact that this community contains significant rangelands.
- Comment:** The alternatives in the PRMP/FEIS should display the amounts of early successional stages in each alternative during the first decade.
- Response:** Figure 4-BD-1 of the Draft RMP, "Seral State Diversity for Alternatives - 10 years in Future," displays the percentage of forestland in each successional stage by alternative.
- Comment:** Contrast the differences of early successional stages resulting from natural processes and those resulting from silvicultural prescriptions.
- Response:** See revised Chapter 3, Biological Diversity, in the PRMP/FEIS for a discussion on disturbance.
- Comment:** "The reduction of mature and old growth forest stages represents the most serious problem for wildlife in the planning area." The Rockydale Neighborhood Association feels strongly about the need to retain and enhance these more mature stages within the district. This will certainly not be accomplished through the use of even-age activities in these mature stands as prescribed in the preferred alternative in the Draft RMP. Vertical stand diversity is an important component to

ensuring wildlife diversity. The preferred alternative recognizes that past even-age management activities on the district have failed to ensure the retention of vertical diversity and therefore calls for integrating "biological legacy" into the even-age management regime. However, the Draft RMP acknowledges "several cavity-using species do not readily nest or forage in isolated trees in the middle of clear cuts." Apparently, retaining 2-5 trees per acre is insufficient for ensuring the vertical diversity required to retain biological diversity in the forest.

**Response:** Two general management systems are proposed for matrix lands in the Medford District. On more mesic sites a "northern prescription" is proposed. On these sites an average of 6-8 conifers per acre plus snags and representative hardwoods would be left within harvest units. Retained trees would be grouped or distributed to meet resource objectives and still be operationally feasible. On more xeric sites, such as some in the Cave Junction area, a "southern prescription" is proposed. On these sites 80-120+ft<sup>2</sup> of conifer basal area per acre plus snags and representative hardwoods would be retained. Harvest would be by individual tree selection or patch cut. Both prescriptions are expected to provide for structural (vertical) diversity over the course of stand development.

In a study done in the area of Cave Junction, Oregon, south to Branscomb, California<sup>1</sup>, a comparison of stand age and species of birds and small mammals present was made. The study found that while stand age was a factor in the abundance of many species, stage age (seral stage) made no difference in the average number of species recorded.

<sup>1</sup>Ralph, John C., Peter W.C. Patton, and Cathy A. Taylor 1991. "Habitat Association Patterns of Breeding Birds and Small Mammals in Douglas-fir/Hardwood Stands in Northwestern California and Southwestern Oregon," Wildlife and Vegetation of Unmanaged Douglas-fir Forest, USDA, Forest Service, PNW-GTR-285.

**Comment:** For Alternative D only, a data base model was used to ensure that the 50-11-40 requirement for spotted owls was met. We recommend that you expand this model to include other "cumulative effect" factors which may limit your harvest level in the coming decade. This model could calculate the allowable harvest acreage for each relevant subarea of the district for the coming decade(s) and be used in conjunction with the TRIM\*PLUS model. Alternatively, a short term linear programming model (FORPLAN or SARA) could be used to determine the potential harvest acreage by subarea and type in the first few decades of the plan.

**Response:** On the Medford District, 50-11-40 objectives for Alternative D were developed through ORGANON model yield tables and run in TRIM\*PLUS. Forty percent crown closure was retained. A data base model was not used.

Acreage available for timber harvest in the next decade was reduced for "cumulative effects" reasons in the Draft RMP and the PRMP. Lands within deferred watersheds are available in the first decade of the plan and are then metered in to the available acres at the rate of 25 percent per decade. Lands within key watersheds are unavailable for harvest until watershed assessments can be made.

## Old Growth Forest

**Comment:** The DEIS violates NEPA by failing to adequately describe the complexity of old growth forests.

**Response:** Books have been written describing that complexity, which the EIS recognizes. It is not appropriate for an EIS to repeat at length general information previously published.

**Comment:** Preservation of old growth forests is impossible as trees have finite life spans.

**Response:** Although individual tree death is a natural part of old growth ecosystems, Morrison and Swanson (1990) and Agee (1991) showed that old growth Douglas-fir ecosystems persisted on sites over many centuries. These ecosystems are renewed and regenerated by under-canopy and patch-



work fire, and gap mortality. Our EIS examines the ability of the different alternatives to provide old growth habitat within the general BLM-managed landscape. The loss of some older stands from wildfire and other causes, and the death of trees is assumed and is included in seral diversity analyses. It is also assumed that prescribed fire and other practices would sometimes be used to control seral changes within older stands which might cause them to deteriorate away from desired old growth conditions (e.g., shifting away from conifer dominance and toward tanoak dominance).

**Comment:** The old growth inventory should be corrected or augmented to identify old growth stands meeting the PNW-447 and GTR-285 definitions.

**Response:** We do not have a specific old growth (late successional stage) inventory. We have an operational inventory of timber stands within which late successional forests are located and their timber inventory attributes identified. These attributes include overstory and understory timber size, volume and age classes. An inventory of these forests to determine the character of old growth is under consideration while the broad range of features needed to be inventoried are determined.

Late successional age classes are fairly evenly distributed over the general landscape. Approximately two-thirds of these stands currently occur in proposed reserves or special management areas. About one-third occur in the Matrix. Additional inventory of these lands is expected and a determination of their late-successional values will occur in the plan implementation process.

**Comment:** Old growth could be heavily impacted by density management and lose its habitat value.

**Response:** Stands meeting minimum old growth definitions are not proposed for density management. Within late seral reserves there is no proposed harvest in stands over 80-years old. Thinning that is beneficial to the creation and maintenance of late successional forest conditions may occur in stands up to 80-years old.

**Comment:** The amount of rare, old forest that will be lost if the preferred alternative is adopted is understated. In the long run only one-third of OGEAs will qualify as old growth. No uncut, natural forest existing in OGEAs today will survive full implementation of the plans. Explain how clearcuts with minimal retention in OGEAs, even with a 300-year rotation, maintain and enhance old growth characteristics.

**Response:** This approach is no longer part of the PRMP.

**Comment:** Small old growth patches may provide necessary ecosystem functions, depending on the relative proximity of other old stands and the general structure of the landscape. Small patches may become quite valuable if they exist in the context of a natural stand that seals edges and provides connectivity. There is no evidence that BLM considered these factors in making land allocations.

**Response:** We agree that the matrix within which older forest patches exist is a significant component of wildlife habitat, as is the total landscape arrangement of habitat grains of various sizes, shapes, and seral stages. As specified in the FSEIS ROD, project-level NEPA analysis will address affects on the remaining late-successional forests.

**Comment:** Old growth acreage should be reported by forest cover type.

**Response:** Reporting such information would be desirable but at this time that information is not available. As the forest plan is implemented and watershed analyses are completed, this information will become available.

- Comment:** The GIS technology should be used to identify patches of ancient forest embedded in mature forests that could develop interior conditions in the near future and to target other areas for restoration of interior forest habitat.
- Response:** Our Operations Inventory is not detailed enough to identify the features relevant to such projections. And our current GIS system lacks image processing capabilities to identify and classify these areas. The GIS technology was used, however, to help select lands for late successional reserves which will provide much of the long term interior old growth forest on BLM-administered lands. Watershed analysis will further consider potential future landscape arrangements.

## **Wilderness**

- Comment:** The Soda Mountain Wilderness Area should be protected, gates closed, and enlarged to include up to 32,000 acres. Management should also consider the ecological values includes in the connecting corridor between the Siskiyou Mountains and the Oregon Cascades.
- Response:** Wilderness is not an issue being addressed in this PRMP/FEIS. The wilderness issue was addressed in the statewide Oregon Wilderness EIS published in December, 1989. The BLM has recommended and the President has forwarded to Congress that approximately 5,867 acres in the Soda Mountain Wilderness Study Area be designated as wilderness. Until Congress acts, the Soda Mountain WSA will be managed under interim guidance to protect the values which contribute to wilderness characteristics. Parts of the larger area recommended by conservation groups for wilderness designation are included in a Late Successional Reserve which may help protect wild land values. Other parts of the area will also be managed as the Siskiyou/Cascades Ecological Emphasis Area which will help protect and manage the important ecological values found in this corridor.
- Comment:** Three other areas within the Medford District through public comments received on the Draft RMP/EIS were recommended for evaluation and protection as wilderness areas under the Wilderness Act.
- Response:** As stated above, the wilderness issue is not being re-addressed in this PRMP/FEIS. This is consistent with the issue identification process used at the start of this PRMP. The three areas under question are located partially within late successional reserves (LSRs) which will offer limited protection of wild land values. However, it should be noted that LSRs are not managed to protect wilderness or wild land values.

## **Ecosystem Management**

- Comment:** The checkerboard ownership pattern makes it unlikely that the ecosystem management objectives will be achieved.
- Response:** The PRMP approaches ecosystem management utilizing a variety of temporal and spatial landscape allocations. It is true BLM manages land that is mostly in a checkerboard pattern. The ecosystem management vision cannot be achieved by BLM alone but through cooperation with other public agencies over a broad landscape. Such cooperation is a strong component of the FSEIS decision strategy.
- Comment:** Identify how silvicultural practices will lead to the goals of ecosystem management.
- Response:** Silvicultural systems define the sequence of management practices that take place over the life of stands in a managed forest to meet land management objectives. See Appendix K for structural retention and development of late successional stage systems. Structure in an ecosystem or community is the relationship of physical size, height and vertical stratification of vegetation.

Managing younger stands with low levels of structural diversity toward more complex conditions is important in several land use allocations to meet non-timber objectives.

**Comment:** Specify methods for coordinating biological diversity and ecosystem management goals with other landowners, specifically the Forest Service and the State.

**Response:** The FSEIS ROD addresses this topic primarily in the Interagency Coordination discussion in Section E of its Attachment A.

**Comment:** The silvicultural systems proposed bear no resemblance to natural processes that should be emulated in a program of genuine ecosystem management. The overall effect of the intensive management regime proposed will be a highly fragmented landscape with some stands of old growth trees but few if any, other characteristics of an ancient forest ecosystem. Even the pattern of residual trees bears no resemblance to natural mortality. Natural catastrophic fire would leave many well-distributed snags and clumps of green survivors. The scattering of residual trees proposed would not likely survive the first major winter storm.

**Response:** The rationale for partial tree retention is not so much to precisely parallel natural processes as it is to provide a biological legacy and maintain long term site productivity (see the FEMAT report, P. IV-34). A legacy is something passed on from one generation to future generations. Like trees which survived catastrophic fires or windstorms, retained legacy trees can be both well distributed and clumped, and would provide a source of seed as well as important habitat components such as large green trees, snags, and eventually, large down logs. While blowdown and breakage is a problem in some locations, experience indicates that most retained trees would remain standing for many years.

**Comment:** It appears that the major driving force in this RMP is the Endangered Species Act. While we share with the BLM the difficulties created by the single species management direction of the Endangered Species Act, we are unable to determine from the RMP the true impacts of this management direction. The true costs of managing for the various species listed under the Endangered Species Act must be clearly set forth. In addition we must have sufficient baseline data and monitoring programs in place to determine the success of this program. We recommend that the RMP clearly set forth the target populations for each of the listed species, current population status, management goals, and a detailed monitoring program.

**Response:** The management strategy proposed is ecosystem based management. Although some allocations are for single species, it is not possible to isolate the trade-offs (cost) involved in managing for any single listed species. Baseline data is still being gathered and will continue to be gathered. Monitoring programs will be interagency and are being developed in accordance with the monitoring strategy set forth in the SEIS record of decision (ROD). That ROD did not identify target populations, but recovery plans may, that is more appropriate the role of recovery plans. What is know of current population status is set forth in chapter 3 of the PRMP/FEIS. Management objectives (goals) are in chapter 2.

## Vegetation

**Comment:** Contrast the differences between early successional stages resulting from natural processes and those resulting from silvicultural prescriptions.

**Response:** The structural differences between seral stages resulting from various levels of natural stand replacement and conventional, even-aged management are shown in Figure 3-V-2. Silvicultural systems can produce early seral stages with a wide variety of structures and compositions depending on the approach taken, including structures and compositions which resemble those originating from natural processes. The primary difference between the compositions of young

stands arising from natural disturbance and young stands arising from harvests are lower levels of standing dead and down wood.

**Comment:** The plans should include a detailed summary of forest age class distribution through time, with a separation of two-stage and multi-stage stands.

**Response:** Such projection would be complex and time consuming and would be unreliable until most watershed analyses are done. We believe it would have little utility without information on spatial distribution, which cannot be projected.

**Comment:** The importance of conserving relatively rare hardwood forests is virtually ignored. Conversion of hardwoods to conifers should be approached with caution, as there are ecological reasons why many sites are dominated by hardwoods.

**Response:** Conversion is proposed only in the GFMA on sites considered natural conifer sites where past management led to conversion of the site from conifers to hardwoods. The PRMP provides for the retention of existing natural hardwood stands and their management for the sustained yield of hardwood resources. Species diversity requirements for reforestation actions, prescribed fire treatments, and subsequent stand management will assure the retention of native hardwood species within stands considered for active management.

**Comment:** Display current acreage of major hardwood groups in conifer dominated stands, mixed conifer-hardwood stands and hardwood dominated stands. A further breakdown into seral hardwoods and hardwoods commonly present throughout the life of a stand would be helpful. Display projected changes in these hardwood areas by Alternatives.

**Response:** Current data is incomplete and we have little basis for projecting future conditions in a quantified way.

**Comment:** Develop and display goals, objectives and prescriptions for maintaining hardwoods, minor conifer species and shrubs.

**Response:** Objectives have been added regarding native plant communities and species. Prescriptions are implicit in the management actions/direction, but would be site-specifically developed in implementation plans.

**Comment:** Identify minor conifer species present in conifer dominated stands.

**Response:** See Appendix 4-V-1, Draft RMP, for a description of the general species composition of natural stands and their projected composition for different silvicultural approaches. Species composition varies considerably between ecological types. A more detailed description of the species composition of southwestern Oregon forests can be found in the constancy and frequency tables published in the USFS plant association guides and in Franklin and Dyrness which this document references.

**Comment:** Address how current and proposed management complies with the Pacific Yew Act. Do this in addition to the separate EIS, being prepared by the Forest Service with BLM cooperating.

**Response:** Such duplication is neither efficient nor appropriate.

**Comment:** The Pacific Yew Act effectively bans even-aged management and slash burning in yew habitat. The Draft RMP fails to adequately protect yew trees. The Pacific Yew Act may also require replanting of yew to the same stocking levels as before harvest.

**Response:** The Pacific Yew Act expired in accordance with its terms and letters to the Congress from the Secretaries of Health and Human Services, Agriculture, and Interior, in January of 1994.

## Appendix V

- Comment:** The Draft EIS violates NEPA because it fails to disclose how long the proposed yew bark harvest rates can be sustained.
- Response:** The Draft RMP/EIS does not propose any specific rate of yew harvest. A permissible rate of harvest from National Forest System and BLM-administered lands was identified in the Record of Decision on the joint BLM-Forest Service Pacific Yew Management EIS, and its sustainability was analyzed in that EIS.
- Comment:** Disclose where suitable mushroom habitat exists and the environmental impacts of logging on mushroom populations.
- Response:** Data on suitable mushroom habitat is currently limited. The distribution and abundance of these species has not been determined on most BLM-administered lands. Chapter 4, Vegetation, has been expanded to address such impact concerns. In general, fungal species that are adapted to environmental conditions provided by partial or closed canopies would be favored under Alternatives C and D, and the reserve areas of Alternative E. Species more adapted to open areas would be favored under Alternatives NA, A, B, and the nonreserve areas of Alternative E. It is unknown the extent to which the PRMP would effect mushroom habitat. Harvest of mushrooms would be done in compliance with appropriate National Environmental Policy Act (NEPA) regulations and ecosystem management. The final BLM Task Force Report, *Managing Special Forest Products in Oregon/Washington* was approved by the BLM State Director on March 31, 1993. It recommended that the BLM identify inventory, monitoring and research needs that reflect the biological sensitivity, public demand and interest in any given species of special forest products.
- The *BLM Forest Ecosystem Inventory Handbook*, published in October 1993 allows for collection of data on mushroom species, quantity and quality. This inventory has begun.
- Comment:** Harvest of minor forest products (such as salal, beargrass, ferns, moss and fungi) should be more carefully managed. Collection of such products should be by permit only, and should be monitored and enforced.
- Response:** Discussions of management for such products has been added to Chapter 2. Authorized harvest will be by permit only. Monitoring and enforcement will be accomplished through sampling.

## Riparian Zones

- Comment:** Define expected future conditions for RMAs.
- Response:** Objectives addressing future conditions have been added to the PRMP, derived from the Aquatic Conservation Strategy Objectives in the FSEIS, Appendix B6.
- Comment:** Establish standards for all stream orders, reflecting functional and ecological differences between orders. These factors should ensure shading, water quality, microclimate, floodplain protection, critical habitat for wildlife, and sensitive species.
- Response:** Riparian reserve widths for five categories of streams or waterbodies are described in Chapter 2. The widths reflect functional and ecological differences between the five categories. Riparian reserve objectives in Chapter 2 address the factors identified.
- Comment:** Address riparian area management at the watershed or landscape level, reflecting the current condition of watersheds.
- Response:** This will be done during watershed analysis.



- Comment: Clarify how average widths shown for RMAs are utilized in on-the-ground analysis. Include both the documentation and the mechanisms to fully protect all beneficial uses for riparian areas including wetlands.
- Response: See previous response. Watershed analysis will identify the riparian reserve widths needed on specific stream reaches, wetlands, or other water bodies, to meet RMP objectives. Aquatic conservation strategy objectives would be met by completing watershed analysis (including appropriate geotechnical analyses) prior to construction of new roads or landings in riparian reserves.
- Comment: It is inappropriate to allow roads in riparian management areas to access timber harvest in other areas.
- Response: Construction of roads upslope and near ridges is normally preferred, but occasionally construction within (but toward the outer edge of) a riparian reserve may reduce the total road length needed for harvest access by so much that it is considered environmentally preferable to build the shorter road. Any road construction in riparian reserves would occur only after watershed analysis.
- Comment: BLM's proposed riparian management on perennial streams is approximately half as wide as recommended by the Scientific Panel on late-successional forest ecosystems, which said, "Establishing wider riparian corridors on federal lands across the landscape will provide additional protection from disturbance and help initiate recovery of degraded areas."
- Response: In the PRMP, riparian reserve widths on perennial streams have been expanded to the widths recommended by the Scientific Panel.
- Comment: If riparian buffers are not at least three times the height of the tallest trees, windthrow over time will negate the design of the buffer.
- Response: Windfirmness varies among sites. We do not believe such a generality is true.
- Comment: Restoration of riparian areas in poor or deteriorating condition should be a high priority.
- Response: Priority will be given to restoration of degraded riparian areas. Watershed analysis will help identify priority areas. Key watersheds will have particular emphasis.
- Comment: RMA width should be appropriate to meet water quality standards, supply potential large woody debris and down wood, and manage for sensitive riparian-dependent species within a landscape context.
- Response: The PRMP riparian reserve widths aim at all these objectives. The opportunity to meet all of them (e.g., large woody debris) will not occur for many decades along some stream reaches.
- Comment: Plant conifers within hardwood-dominated riparian areas.
- Response: This will be incorporated in watershed restoration efforts..
- Comment: Since tree diameter was selected as a measure of riparian zone health, indicate how diameter thresholds were selected.
- Response: The diameter thresholds were those available from our current extensive forest inventory (the operations inventory), which divides forest stands into four diameter classes. The largest class, above 21 inches, was defined as best (good/optimal). The second largest, 11 to 21 inches, was defined as next best (fair). The others were defined as poorest (minimal).

#### Appendix V

- Comment:** Since the Draft RMP/EIS determines the riparian zone forest age and size based on the timber operations inventory for adjoining up-slope trees, address the inventory's accuracy in riparian zones.
- Response:** There is a general relationship between the age and composition of the riparian community and the instream woody structure that creates fish habitat. The relationship is far from absolute, as we are aware, but the vegetation is a good general indicator of the overall health of a system. In the absence of detailed data on all streams, we elected to use vegetation information as the best method for approximating stream health.
- The rating system assumes a conifer forest in the riparian zone and utilizes mean tree diameter throughout adjacent operation inventory units as a primary indicator of riparian condition. This technique has its limitations. For instance, conifers in riparian zones can have a somewhat larger diameter than in adjacent areas upslope because of deeper soil and higher soil moisture in draw bottoms. This is especially true of the more xeric sites (e.g., southern portions of the district). The rating system probably underestimates riparian condition in yet another way. Approximately 6 percent of the planning area is dominated by hardwoods and brush. The ecologic potential for streamside vegetation dominated by hardwoods occurs at a smaller diameter than if conifers were the dominant overstory vegetation.
- Although this technique for estimating mean tree diameter in riparian zones has its limitations, we believe it provides a reasonably good indication of vegetative structure and species diversity in riparian zones in the absence of more site-specific data.
- Comment:** Provide tree species and density data and describe factors that may limit future riparian zone maintenance and production, such as water table alteration, in the riparian analysis.
- Response:** Neither our forest inventory data nor other data are consistently specific enough to be considered valid for this purpose in riparian zones. Watershed analysis is expected to begin to address such concerns.
- Comment:** Exclude livestock in grazing allotments where poor riparian area conditions have been identified until such time as the riparian area reaches good condition.
- Response:** Grazing management will be adjusted, if necessary, to meet the Aquatic Conservation Strategy.
- Comment:** Mining activities in or adjacent to streams should be managed in a way not to adversely impact riparian area vegetation and water quality.
- Response:** Mining activities will comply with State water quality criteria, surface mining regulations and best management practices.
- Comment:** The hyporheic zone, absolutely vital to riverine ecological functioning, is not mentioned or planned for in the Draft RMP.
- Response:** Hyporheic zones were discussed in the Draft RMP/EIS, Chapter 4, Effects on Riparian Zones.
- Comment:** Although we agree that minimum area riparian buffers should be stated, we do not believe that the proposed actions (Chapter 3 and elsewhere) will provide streams with adequate protection. Consideration of the characteristics of each stream and riparian area on a case-by-case basis may provide for the most sound ecological management.
- Response:** We feel the Riparian Reserves described in the proposed plan will provide adequate stream protection.

**Comment:** The preferred alternative should not have a negative impact on riparian habitat and species. The protections and positive impacts associated with Alternative E should be adopted in the preferred alternative.

**Response:** Riparian reserves have been expanded in the proposed plan to provide greater protection to riparian and wildlife habitat.

**Comment:** Stream channels should be included in the wetlands classification.

Wetlands locations are incomplete because they do not include stream channels. Stream channels and associated floodplains are riverine wetlands according to the Fish and Wildlife Service classification system. Even first order channels would qualify because they run water during the frequent winter storms.

**Response:** We agree that stream channels are considered riverine wetlands, however, for the purpose of the Draft RMP/EIS they were treated separately.

**Comment:** Removal of Riparian Wildlife Habitat, Draft RMP, second paragraph, states that under the PA, "timber harvest in these small headwater streams would have a substantial negative impact on wildlife species associated with these small riparian zones, especially amphibians, because of the large extent of the disturbance. This would also cause a large reduction of habitat diversity in the landscape compared with Alternative E which would retain riparian habitat on all streams." In view of the above, the final selected alternative should include the provision to protect riparian habitat on all streams. All riparian areas total 70,453 acres (page 3-41) which is only 8 percent of the Medford District's lands. Further as stated, "these areas would also provide important connectivity between blocks of suitable habitat when the adjacent uplands have been harvested."

**Response:** Riparian areas along all streams will be protected under the proposed plan.

**Comment:** Riparian management areas for orders 3 through 9 should be stronger than Alternative C.

Alternative C is less than optimum for maintaining riparian air temperature, humidity, light, etc., even though it physically protects all riparian vegetation and is a big improvement over existing policy.

**Response:** The proposed plan incorporates riparian reserves that are wider than Alternative C.

**Comment:** RMA's have to consider water retention and spring and summer runoff characteristics. Spring runoff (snowmelt) has to be prolonged as long as possible in order to have water for human uses over a longer period of time, and allow for improved fish habitat. RMAs should include as part of their size justification data not only on water temperature but also on water turbidity, acidity (Ph), dissolved solids, aquatic life, and presence or absence of harmful chemicals (nitrates-herbicides).

**Response:** Objectives for Riparian Reserves in Chapter 2, address these concerns.

**Comment:** Riparian management widths should be doubled where broadcast burning is prescribed to ensure that streams are adequately protected.

Best Management Practice VIII.A.3.b. (Appendix 2-23) is inadequate to protect riparian vegetation from broadcast burning. Some slopover will inevitably kill trees along streams and eliminate shade.

**Response:** Broadcast burning for site preparation will be conducted in a manner designed to prevent or minimize damage to riparian areas. Burn scheduling considers factors such as aspect, fuel loadings, moisture content of the fuel, and weather. Limited use of fire in riparian areas, in some

instances however, may be desirable.

- Comment: The BLM should reintroduce large woody debris as part of a management scheme in a timber sale program to allow for more stream structure and stability.
- Response: In-stream restoration measures such as introducing structures are inherently short term and must be accompanied by riparian and upslope restoration to achieve long term watershed restoration. (See Standards & Guidelines, attached to ROD, Appendix B).
- Comment: We propose that the BLM consider a two-zone approach to riparian zone management. Seventy-five (75) to 100 feet of no activity on stream orders 3 through 9, with 100 to 150 feet of managed activity. We would support the BLM riparian zone management direction if it were more in line with the State of Oregon Forest Practices Act now being considered. We strongly believe in riparian protection since it is so beneficial. The BLM has gone beyond what is reasonable and has severely compromised the Resource Management Plans PSQ.
- Response: Adjustment to riparian reserve widths in the proposed plan may occur after completion of a watershed analysis.
- Comment: We note mention of the "BLM Riparian-Wetlands Initiative for the 1990s," but recall the Oregon/Washington Riparian Enhancement Plan (1987) showed no Medford participation (pp. 2-6). We request Medford District BLM make the 1990s Riparian-Wetlands program a priority in activity planning to evidence BLM's commitment to multiple-use public lands management.
- Response: The 1987 Oregon/Washington Riparian Enhancement Plan only included BLM districts in eastern Oregon and Washington. A draft revised Oregon/Washington Riparian Enhancement Plan reflects Medford District's accomplishments.
- Comment: Riparian management areas need to be adequate to protect streams and rivers from sedimentation. RMA width needs to be a minimum of 150 feet or three times the highest vegetation within the riparian zone. Regulations need to prohibit timber harvest, broadcast burning, road building, and cattle grazing along 1st and 2nd order streams without RMAs less than 150 feet.
- Response: The expanded riparian reserves in conjunction with best management practices will provide adequate stream protection.
- Comment: There should be no logging slash in streams if proper RMA's are allowed and proper practices are followed.
- Response: The expanded riparian reserves in the proposed plan should greatly reduce or eliminate the entry of logging slash in streams.
- Comment: Roads should be excluded from the riparian management areas (Meehan, W.R. 1991). There are already too many roads along streams. Stream crossings should be reduced with a ridge-top road system. A minimum 50-100 foot unlogged area should be maintained between any stream channel and new road construction, side cast or fill.
- Response: New road construction will be minimized in riparian reserves and will only occur after completion of a watershed analysis.
- Comment: On page 4-66 of the Draft RMP, it states that of 40 percent of BLM stream miles, it is "expected that hydrologic and biological functions and fish production potential is less than optimum for these streams for the next 12 decades". This is not acceptable. Improvement goals should be: improve soil stability, reduce surface runoff, increase infiltration, and reduce flood occurrence and damage.
- Response: Resource objectives are listed in Chapter 2.

- Comment: On page 86 in the Draft RMP you mention "...yarding corridors across streams and riparian zones". Understandable, but what percentage of these areas would be disturbed?
- Response: Best management practices such as avoidance of yarding corridors in riparian reserves when possible and minimizing the number and width of yarding corridors should keep the area disturbed to a minimum.
- Comment: Different methods of rating riparian zones should be resolved and/or consolidated for the final RMP/EIS. Consistent rating systems will facilitate and simplify implementation of the PRMP and monitoring strategies. (For example: In Table 3-RZ-1, riparian zone condition is rated as minimal, fair, and good/optimal by the diameter of the trees in the riparian zone. In the WCI (pages 3-24, Volume II) riparian zones are rated poor, fair, and good by percent vegetative cover. In the riparian management objectives (Table 2-20, pages 2-107) the riparian ecosystem objectives are rated for low, moderate, and high levels of wildlife and native plant diversity.
- Response: The WCI and riparian management objectives tables are eliminated in the PRMP/EIS.
- Comment: The RMA widths in the PA are excessive, they are not based on scientific data, and the rationale is lacking. Riparian buffers in the PA exceed widths required by the Oregon Forest Practices Act which are adequate for protecting water resources.
- Response: Resource objectives for riparian reserves are listed in Chapter 2. Riparian reserves are intended to protect more than just water quality. Fish, wildlife, and riparian resources were also taken into consideration for the determination of riparian reserve widths. Stream buffers in the Oregon Forest Practices Act are primarily intended to protect water quality.
- Comment: BLM should adopt the riparian habitat conservation areas and standards outlined by the Scientific panel on late-successional forest ecosystems for stream protection on all public forestland management.
- Response: The riparian reserves and management direction included in the proposed plan are the same as outlined in the report of the Scientific Analysis Team (SAT).
- Comment: The RMAs in the PA are inadequate to protect water quality, fish, wildlife, and riparian values.
- Response: Riparian reserves have been expanded for all streams in the proposed plan to maintain and restore water quality, fish, wildlife, and riparian values.
- Comment: RMAs for intermittent streams and particularly first and second order streams are not adequate to protect water quality, fish habitat, and wildlife.
- Response: Riparian reserves will be established on all intermittent streams.
- Comment: Lack of definitions for "first to fifth order streams" in your Draft RMP increases the difficulty in analyzing watershed and riparian management.
- Response: Definitions and descriptions of stream orders are included in Chapter 3, Water Resources.

## **Wildlife**

- Comment: Road closure programs and limited recreation access during periods critical to elk can effectively mitigate the security needs of the species. The alternatives which are most likely to negatively affect elk are Alternatives C, D, E and to a slightly lesser extent the BLM's Preferred Alternative.



## Appendix V

- Response:** The Proposed RMP has objectives for road access management that are not found in Alternative NA, A or B. This access management is one of the features incorporated into the Proposed RMP specifically to reduce adverse impacts to elk. Habitat analysis was accomplished using the Wisdom model, the most widely accepted model for this purpose. This analysis showed the Proposed RMP to be one of the best Alternatives for elk management.
- Comment:** In the analysis of wildlife populations, spatially explicit models were not used (excepting for spotted owls) and hence projections may be overly optimistic.
- Response:** Spatially explicit models do not exist for most wildlife species, but another one used was the elk model. The best available models that could be applied using BLM's data base were used in the analysis of effects.
- Comment:** There is an over-reliance on riparian zones for meeting the needs of wildlife communities. Many of the upland species habitats are not considered.
- Response:** We disagree that there is an over-reliance on riparian zones. Upland habitats will be maintained or enhanced in significant amounts in Late-Successional Reserves, connectivity/diversity blocks, and special management areas.
- Comment:** The wildlife species have been aggregated into groups that are inappropriate for assessing viability.
- Response:** Aggregating wildlife species into groups with similarities in habitat requirements complements the concepts of ecosystem management. We acknowledge that there are some differences between species needs in a particular group (e.g., amphibians), but there are also broad similarities which can be dealt with more suitably in the development of forest plans often affecting hundreds of thousands of acres. One of the supposed advantages of ecosystem-based management is to avoid the problems inherent on a species-by-species approach; primarily those of conflicting habitat requirements of individual species. A goal of ecosystem-based management is to provide a balance of all potential natural vegetation communities suitably distributed across the landscape. Viability assessment is primarily provided by the SEIS and the FEMAT report.
- Response:** We agree except where strong field evidence dictates otherwise.
- Comment:** The effectiveness of Connectivity Areas as corridors for wildlife movement has not been adequately addressed. Consider their width, current habitat fragmentation within the corridors, the effect of timber harvest on habitat mosaics including anticipated patch size, land ownership pattern and the different dispersal needs of wildlife.
- Response:** In the PRMP, the concept has been revised. Connectivity/diversity blocks will not be confined to specific corridors but will be spread out across the landscape. The idea is to enhance biological diversity and to help provide for dispersal of mobile wildlife species. On the Medford District, management proposed for the Southern regime will provide for additional connectivity/diversity.
- Comment:** A 100 or 150 foot RMA for lakes, and ponds and other waterbodies may not adequately maintain or protect the inherent value and habitat use of the waterbody and adjacent zone, especially for fish-eating raptors.
- Response:** The PRMP expands this width for lakes and reservoirs. Buffer prescriptions will be evaluated by interdisciplinary teams to determine the most appropriate buffer widths for a specific site based on wildlife, water quality, and fish habitat considerations.
- Comment:** Conduct a district-wide inventory of sensitive wildlife areas and areas with currently high densities of OHV use.

- Response:** A partial district-wide inventory of sensitive wildlife areas has been accomplished (e.g., nest sites of ospreys, great blue herons, marbled murrelets, bald eagles, spotted owls). Gathering updated information as well as additional species data will be part of monitoring and continuing inventory. High OHV use areas are known and are identified.
- Comment:** Provide management consideration for all species contained on the District that are described in the ODFW's 1992 "Sensitive Vertebrates of Oregon".
- Response:** Most of the species listed in ODFW's 1992 list of "Sensitive Vertebrates of Oregon" are addressed as Special Status Species in the PRMP/FEIS.
- Comment:** Identify the species expected to benefit from connectivity areas, and their expected function for each species. Evaluate the ability of the areas to provide these functions, relating to their locations, width, and proposed management. Address their lowest condition expected relative to old growth characteristics and its relation to desired future condition.
- Response:** Not enough is known about the mobility patterns of species to permit a species-by-species discussion of the value of these areas.
- Comment:** A more formalized risk assessment regarding old-growth sensitive species needed. Alternative E could serve as a benchmark.
- Response:** Risk assessment regarding such species was accomplished in the SEIS.
- Comment:** Address how BLM proposes to improve marginal elk forage conditions and to meet habitat effectiveness and herd number objectives.
- Response:** We propose to conduct some forage seeding to improve elk habitat. The cover quality and spacing indices would likely be improved by establishment of reserves and connectivity/diversity blocks. We also propose a variety of road closure or access limitation measures to reduce road density levels.
- Comment:** Where feasible, expand forage siding programs to benefit big game.
- Response:** We propose to do some forage seeding. However, this program will necessarily be limited by the reduced level of clearcutting and burning under the PRMP. For example, past observations indicate that forage germination is best after burning has produced black ash seedbeds. This condition is expected to be limited in the future. We are also considering the use of native forage species in future forage enhancement projects. Unfortunately, lack of a reliable source of seeds for native species may also limit our forage enhancement program.
- Comment:** The method used to analyze effects on elk populations is flawed. The importance of "optimal thermal cover" to elk is grossly exaggerated. The fastest increase in elk populations ever recorded occurred in the Mt. St. Helen's blast zone, where optimal thermal cover does not exist. There is no evidence suggesting that "winter kill" of elk, which thermal cover attempts to ameliorate, is a problem in western Oregon.
- Response:** The Wisdom Model is considered the most widely accepted professional model to analyze elk habitat condition at this time. It was developed by professional biologists and represented the best information at the time of its development. Validation of the model is the subject of a research study currently being conducted by Oregon State University in conjunction with BLM. The Wisdom Model was developed for forest ecosystems, not blast zones.
- Comment:** Re-evaluate elk habitat conditions using all four habitat variables in the Wisdom model. Identify the current habitat effectiveness for the four variables by sub-watershed. Include private lands in the assessment.

Response:

Application of the Wisdom Model to BLM-administered lands was modified to reflect shortcomings in BLM's existing database. For example, we currently do not have sufficient vegetation data on private lands to permit an automated analysis of existing elk habitat condition over all ownerships. This limitation was shared with ODFW at an early phase of our analysis. We have, however, developed an automated analysis to evaluate elk habitat condition on BLM-administered lands using the forest inventory database. Three of the four indices are readily calculated using this method. The fourth index, the spacing index, can be calculated using automated methods but it is fairly cumbersome and time-consuming. With scattered private lands in many of the analysis areas, the spacing index for BLM-administered lands only may be less meaningful than the indices produced for the other three variables. ODFW has developed criteria to approximate the spacing index by using proportions of cover and forage.

Our automated procedure produces area tables to calculate habitat effectiveness indices and graphical outputs to display habitat condition. The procedure also produces acres of private lands within the analysis area (e.g., watershed or some other polygon). Thus, estimates of elk habitat condition on private land can be made and proportionally related to total acres of private land. Due to the very limited amount of thermal and optimal thermal cover on private lands, plus the lack of forage seeding on much of this land, index levels are anticipated to be even lower than calculated values for BLM-administered lands only. This was the case in one sample district where this analysis was done using our gross vegetation theme as the database from which estimates on private land were made.

Evaluation of elk habitat condition was not extended to the sub-watershed scale because we believed this to be most properly evaluated during landscape analysis as part of implementation planning than at the Draft RMP/EIS level. This was also discussed with ODFW in the initial phases of our analytical work. At least one district used watersheds for the RMP/EIS analysis, but these areas were much larger than the 1-6,000 acre level suggested by the Wisdom model. However, these large watersheds can be subdivided into smaller sub-watersheds which could serve as permanent compartments to keep records on elk habitat condition.

Comment:

Set measurable goals for elk habitat effectiveness on a sub-watershed basis. Develop these goals in concert with ODFW.

Response:

Goals have been developed by ODFW and are delineated in an ODFW document entitled "Plan Review Criteria to Conserve Fish and Wildlife Resources on Bureau of Land Management Forest Lands in Western Oregon."

Comment:

Establish habitat goals to reduce bull elk vulnerability to harvest and relate to Oregon's elk plan.

Response:

The goals established by ODFW for our elk habitat effectiveness indices are related to Oregon's elk plan.

Comment:

Display the amounts of early successional stages in each Alternative during the first decade. Identify the consequences to wildlife species heavily dependent on these stages.

Response:

The percentage of forest land in each seral stage at 10 years and 100 years is diagrammed in Figures 4-BD-1 and 4-BD-2. The basic assumption underlying the analysis of effects in Chapter 4 is that timber harvest on the intermingled private lands within and surrounding the BLM operating area will provide adequate amounts of suitable early successional habitat for species dependent only upon the early seral stage regardless of the Alternative chosen by BLM. Our planning alternatives would add varying amounts to this base. Many species that use the early seral stage for one or more life needs are also dependent upon the presence of other habitat components within the early seral stage, such as snags, fallen trees (logs), residual green trees, etc. Consequences to these species are described in Chapter 4, see Purple Martin and Western Bluebird under "Effects on Special Status Species", and Secondary Cavity Users under "Effects on Wildlife".

- Comment: Identify concrete proposals to create snags, including estimated budgets. Adjust PSQ to account for snags created over time.
- Response: Included in the objectives of the PRMP, to manage forest lands to retain:
- 1) specific amounts of potential snag habitat following timber harvest, and 2) all existing snags to the extent possible given essential considerations for worker safety. Amounts of timber volume to be foregone for this purpose have been estimated and the PSQ adjusted accordingly. The PRMP commits to provide the specified amounts of habitat through a combination of methods including retention of existing snags and creation of snags from green trees through timber sale contract requirements and by separate projects. "Concrete proposals" to create snags can be developed only on a site-specific basis. Such proposals will be identified in implementation plans which follow completion of the PRMP.
- Comment: Clarify assumptions and goals in modeling green tree retention and snag creation.
- Response: The goal of snag modeling is to describe the process of snag management and quantify impacts on both the timber and wildlife resource. There are three basic assumptions:
1. Green trees retained following timber harvest will be converted to snags at future points in time so that adequate amounts of snag habitat will be available through the life of the new stand.
  2. Concerns about worker safety will prevent retention of all existing snags and in some situations snags will have to be created from green trees after timber harvest.
  3. Green trees and snags left after harvest will become large woody debris when they fall.
- Comment: There should be an assessment of wildlife usage before any snags are removed.
- Response: All timber sale planning will include field inspections by biologists for the purpose of assessing current and future use of the planned sale area by priority species of wildlife, including cavity-users.
- Comment: The Neitro, et al, model used to address the affects of wildlife tree retention on wildlife is plagued by a myriad of problems. These problems cause the model to grossly overestimate the number of wildlife trees required to maintain healthy populations of dependent wildlife species. There is no documentation or justification for the even higher levels of wildlife tree retention proposed in the Preferred Alternative.
- Response: Evidence presented by scientists at Oregon State University indicates the opposite; that, the model underestimates the amounts of habitat needed by woodpeckers since it is based only on woodpecker nest tree requirements and does not consider woodpecker forage substrate needs. Furthermore, the model does not consider the nest tree needs of several species of secondary cavity users that require tree cavities in early and mid seral stages. For example, snags are needed in new timber harvest areas to provide nest sites for secondary cavity users such as bluebirds, purple martins and other swallows even where surrounding forested areas have enough snags to serve as nest trees for woodpecker populations.
- Comment: Identify by Alternative how many acres of suitable pileated nesting habitat will be available and its distribution. Do the same for suitable goshawk nesting habitat.
- Response: Available data does not make such information readily projectable. We believe the key question is species viability or persistence which has been addressed in the SEIS.

## Appendix V

- Comment:** Use the Neitro et al. model used to estimate current populations of woodpeckers for all seral stages and allocations. Weight the populations so estimated by acres of each seral stage to obtain an overall population level. Display those data.
- Response:** The analysis was accomplished in this way. Detailed data are available on request.
- Comment:** Develop comprehensive prescriptions for managing snags to achieve and maintain the population goal for woodpeckers.
- Response:** The focus of the PRMP is its objectives. Prescriptions must be site -specific, varying with existing forest stand conditions, broad ecosystem management objectives and (where appropriate) timber management objectives. They will be developed in site-specific plans.
- Comment:** Assign population goals for woodpeckers for all land allocations.
- Response:** The PRMP allocations compartmentalize much of the landscape outside late-successional reserves into typically small patches of GFMA and connectivity/diversity blocks separated by linear riparian reserves. In such a landscape separable population goals by allocation are meaningless. Over the long-term, sizes of snags retained would be suitable for all species although other habitat conditions may influence which species are most abundant. Pileated woodpeckers, for example, are expected to be more abundant in the reserves and northern flickers may be the most abundant woodpecker in the GFMA's.
- Comment:** Use the snag recruitment model by Neitro et al. to estimate how quickly green trees retained as future snags will actually become snags. Analyze whether potential snag densities will occur in the next 20 years if natural snag recruitment is insufficient. If it is insufficient, prescribe an active program of snag creation.
- Response:** Management proposed under the PRMP incorporates features designed to maintain or increase levels of snags in the landscape. In matrix lands, 6-8 trees/acre would remain after regeneration harvests as biological legacies. These trees would be widely distributed or clumped depending upon resource objectives for the site and operational constraints. These trees would be dedicated to the site and would eventually die, become snags, and then become coarse woody debris on the ground as they fell. Tree mortality and snag formation would continue to occur after density management. Snag formation would also occur in reserve areas. It is expected that populations of woodpeckers would be maintained or increase in both the short and long term. For projected habitat characteristics of matrix lands under the PRMP refer to table 4-BD -8. For modeling methodology see "Modeling the Future Condition and Yield of BLM Managed Forests" available at the Medford district office. Refer to the Silvicultural Appendix for additional details on desired stand structure.
- Comment:** Evaluate the resource trade-offs of managing at the 80% population level for woodpeckers, recognizing that the Neitro et al. model likely underestimates woodpecker requirements for snags.
- Response:** The actual overall long-term effects of the PRMP approximates this level.
- Comment:** The lands should not be managed so intensely as to have to require artificial snag creation to provide viable populations of snag dependent species.
- Response:** Snag creation is not planned for all timber harvest areas. Harvest units as well as other areas would be evaluated to determine present snag levels and the need to create snags to meet resource management objectives.
- Comment:** BLM does not adequately address the importance of its proposed management activities on neotropical migrants. Consider the July 1992 study on neotropical migrants in Pacific Northwest national forests.



- Response: The habitat requirements of the 165 species of neotropical migrants as a group are so diverse as to preclude analysis of the group as a unit. The BLM is in the process of developing a monitoring strategy to begin to acquire the data necessary to analyze the impacts on each species of neotropical migrant. Currently, impacts of the various Alternatives are identified for only a few priority species, some of which are neotropical migrants, for example, osprey, sharp-shinned hawk, Coopers' hawk and purple martin.
- Comment: Address how logging practices are affecting the pond turtle.
- Response: A discussion has been added.
- Comment: An Table 4-WL-2 on pp. 4-57, the title and the wording used in the Table do not make sense together. "Adverse Effects" would be low under Alternative E and high under Alternative A, not vice versa as shown.
- Response: This has been clarified in the PRMP/FEIS.
- Comment: The Medford District BLM should adopt the State of Oregon's recommendations on road management and adopt closures to benefit big game.
- Response: Chapter 2 describes the road closure management direction. The State's recommendations will be approximated within the elk management areas and the big game winter range areas.
- Comment: BLM has not stated how it would improve habitat effectiveness (HE) for big game in areas with low HE indices.
- Response: The RMP will set the goals and objectives and some general management direction to meet those objectives. It will require site-specific activity level plans for each big game management area, watershed or compartment to determine what is needed to meet the objectives in each particular area. In some cases, road closures will be called for, in others, forage enhancement, cover development, or other measures will be needed.
- Comment: The BLM's modeling of elk population levels and habitat require major revision. The modified "Wisdom Model", as depicted in the BLM plans, approaches sheer nonsense. Thermal cover is less important than described and open road densities can be reduced with gates and other road closures. Higher forage levels produced in Alternatives A and B would benefit elk. Overall, elk populations would increase with higher timber output Alternatives.
- Response: The Wisdom Elk Model is not intended to predict actual population responses, but rather to provide a standardized method of comparing Alternatives. One reason for portraying the individual indices separately is to allow independent evaluation of the habitat components. ODFW and other big game experts indicate thermal cover in southwestern Oregon may be a significant concern due to the very hot summers. This may be a different situation than in the Mt. St. Helens area. We concur that gates and other closures can increase security and be effective in reducing harassment and poaching, but these were not components of Alternatives A and B. We also concur that forage would increase under those Alternatives.
- Comment: Maintain or increase levels of old growth and mature thermal cover until the requirements for these components of elk viability are met or at least better understood.
- Response: This will be accomplished within old growth emphasis areas. In elk management areas these older stands will be given consideration for retention to meet habitat objectives as well as provide timber and other resources.
- Comment: BLM should expand forage enhancement programs to benefit big game. Native grass and legume seed sources should be developed to discourage the spread of non-native plants. Fund forage seedings through timber sale receipts. Work with ODFW to meet forage objectives.

## Appendix V

- Response:** We concur that forage enhancement should be increased. Chapter 2 describes the management direction. These intensive management activities would be emphasized within big game management areas. Native species would be used, but sources need to be developed since seeds for native species are available. Funding forage enhancements through timber sale receipts is not currently an option, but the Bureau is seeking to change the way funding is allocated to better address ecosystem management.
- Comment:** Plan should protect salamander habitat, not just the area where they are currently found to provide for future recovery.
- Response:** In some of these species, habitat relationships and requirements are not well known. The ecosystem management approach of the PRMP would retain a diversity of habitats across the landscape to maintain future options. This, coupled with inventories and monitoring, will enable us to change management direction as more complete information becomes available.
- Comment:** Final plans should incorporate a consistent set of management directions for key wildlife species, including wild turkeys and band-tailed pigeon mineral springs.
- Response:** Objectives and management direction for special status species and other wildlife species have been clarified and can be found in Chapter 2. Springs are specifically included in the management direction for special habitats and management direction for wild turkeys has been added.
- Comment:** BLM must seek to maintain viable populations of all species, and not wait until the agency's land manipulation almost threatens species with extinction before taking corrective action.
- Response:** The policy of the Bureau is discussed in Chapter 2. The final plan is designed to maintain viable populations of plant and animal species. The Bureau will design and adapt management actions to avoid contributing to the need for listing any species as well as working to restore populations of those already listed.
- Comment:** More roads should be closed to reduce harassment and poaching of wildlife species.
- Response:** The management direction concerning roads is discussed in the Roads section of Chapter 2. An increasing number of roads will be closed to public motor vehicle use, especially within old growth emphasis areas, elk management areas, and deer and elk winter ranges.
- Comment:** Neotropical migratory birds did not receive adequate attention in the Draft RMP.
- Response:** As a group, neotropical migratory birds were added to the list of priority wildlife species.
- Comment:** Will woodpecker populations be viable in the northern GFMA?
- Response:** Yes, the analysis in Chapter 4 shows that while the current condition and the short-term condition are below the established target levels in the Preferred Alternative, recovery will gradually occur and will exceed target levels in the long-term.
- Comment:** The Preferred alternative does not contain adequate specific protection measures for amphibians, pileated woodpeckers, accipiter hawks and other species.
- Response:** One aspect of adopting an ecosystem management approach is getting away from providing specific protection measures for each individual wildlife species. We recognize the importance of providing specialized protection measures for several species or groups such as raptor nests and these are outlined in Chapter 2.
- Comment:** The use of the snag model is plagued by many problems and over estimates the number of wildlife trees needed to maintain healthy populations of dependent wildlife species.

- Response: The snag model developed by Neitro, et al (Brown 1985) is the best model available and provides a reasonable estimate of impacts of the Alternatives. It must be kept in mind that the main intent in using the model is to compare Alternatives, not predict actual population levels.
- Comment: The Preferred Alternative proposes higher levels of tree retention than are needed for cavity users, old growth structure and coarse woody debris. How were these numbers derived?
- Response: The tree retention levels in the Preferred Alternative are a result of balancing the needs for wildlife habitat, long-term site productivity, timber production and other factors. There is a level of uncertainty concerning whether the levels are adequate to meet the goals. Whether these levels are adequate and how management should be modified will be addressed through monitoring, research, and modifying management actions.
- Comment: Identify acreage of nesting habitat for pileated woodpeckers by Alternative and incorporate into the model.
- Response: Acres of nesting habitat for pileated woodpeckers is displayed in Appendix 4-WL-1 of the Draft RMP. The numbers in this Appendix Table are most accurate for pileated woodpeckers since forested stands greater than 50 years-of-age are used.
- Comment: The quality of hard and soft snags was not incorporated into the woodpecker model.
- Response: This is true. Various species have different habitat requirements and snag qualities. At this level of planning it was impractical to attempt a series of models for each species and each type of snag condition. However, the relationships and trends illustrated for the Alternatives should be the same as those portrayed by the model. It is expected that the more detailed level of analysis will be conducted as part of the landscape level plans or individual project proposal plans.
- Comment: It is fallacious to model woodpecker populations based solely on BLM lands.
- Response: Private lands were considered in the modeling but were not considered to contribute significant amounts of habitat due to the short rotation ages and low density of snags in private cut-over lands. This and other assumptions on which the model is based are detailed in Appendix 4-WL-1.
- Comment: It is important to discuss the value of cavity nesting birds in regulating forest insects.
- Response: This relationship has been addressed in the PRMP/FEIS, Chapter 3 and has been well covered in the scientific literature.
- Comment: The level of tree retention in the Preferred Alternative is not adequate to meet the needs for wildlife species associated with coarse woody debris.
- Response: Chapter 4 identifies that there will be a reduction in CWD levels and there will be adverse impacts on species associated with this habitat component. The exact relationship between wildlife species and the amount of CWD needed are not well understood. Monitoring and research will be used to determine whether management directions need to be modified.
- Comment: In order to adequately project cavity nesters habitat, it is necessary to use smaller units such as the "baseline watersheds" rather than the entire District in the analysis, and also to include the encompassed private lands.
- Response: This is correct. Smaller landscape units will be analyzed in subsequent landscape management plans or individual project proposal plans. At the RMP level of planning we are unable to predict the spatial distribution of habitat blocks at landscape or watershed scales.

## Appendix V

- Comment:** The amount of snags, culls, and down logs to be retained should be clarified. What is the probability of meeting those objectives?
- Response:** The levels and objectives for snags and culls has been clarified in Chapter 2. Currently, although there appears to be some conflicts with OSHA safety standards, we feel confident we can meet those retention level goals. Monitoring and adaptive management will be important to identify any future problems and change management direction.
- Comment:** To promote elk habitat effectiveness, livestock grazing should be abolished from elk habitat or restricted, large older forest stands should be retained, roads should avoid meadows and wetlands, road closures should be implemented, and native species should be used in forage seedings.
- Response:** Most of these measures are incorporated into Land Management Direction in Chapter 2 and will be emphasized in elk management areas. Grazing restrictions are not fully addressed in this PRMP/FEIS since those Alternatives were analyzed in the Grazing EIS.
- Comment:** The Rogue River National Forest has designated big game winter range in the Butte Falls and Prospect area, but BLM does not include this as winter range designation.
- Response:** The big game designations included in this PRMP were developed in conjunction with the Oregon Department of Fish and Wildlife and closely parallels the areas they consider winter range. Criteria include lands below approximately 2,400 foot elevation, plant communities, and areas where concentrations have been observed in past winters.
- Comment:** Plan should consider reintroduction of grizzly bears and wolves.
- Response:** This was not identified as one of the issues or concerns during scoping of the Draft RMP.
- Comment:** In the draft it appears that management of hardwood stands would be the same as it has in the past (No Action Alternative). Will this maintain viable populations of species associated with hardwood stands?
- Response:** Management of hardwood stands is described in Chapter 2, Timber section. Up to 1/200 of the total area in hardwood allocation would be available for commodity production. In the Medford District, there are two distinct types of hardwood stands. There are those consisting of madrone, tanoak, liveoak and other species often in association with conifer stands. Then there are the white oak stands found at low elevations and on shallow soils. The white oak stands will be managed with wildlife, range and biological diversity as the major objectives, not commodity extraction. This management strategy will maintain viable populations of species associated with hardwood stands.
- Comment:** There is no mention of the Pokegama wild horse herd in the DRMP.
- Response:** The Pokegama area is outside of the Medford planning area and is included in the Klamath Falls Resource Area of the Lakeview District, BLM.
- Comment:** What are the benefits of the larger buffers around special habitat in Alternative D compared with the Preferred Alternative.
- Response:** The impacts of the varying buffer sizes are described in Chapter 4, Wildlife section. The larger buffers in Alternative D may provide more complete protection around some of the larger meadows and cliffs, compared with the buffers in the Preferred Alternative.
- Comment:** BLM should not undertake any animal damage control against bears, cougars, beavers, etc..

- Response: Proposed ecosystem based management should greatly reduce the need for direct control of wildlife species that cause damage or mortality in young managed stands.
- Comment: There is no discussion of the affect of predator control on wildlife. This PRMP should address predator control.
- Response: This was not identified as an RMP issue during scoping. The District has an activity level plan dealing with predator control. The impacts on wildlife populations is considered minuscule.
- Comment: Caving snags and coarse woody debris "that could be safely and practically left" is not a genuine commitment to meet those objectives.
- Response: In the PRMP/FEIS, Chapter 2, the commitment is to meet prescribed levels of cavity nesting habitat. We believe we can do this through retaining snags and green trees in harvest units, along with the habitats provided by other allocations. If monitoring indicates that OSHA standards or other problems are not allowing us to meet those objectives, management direction will change to meet them or the PRMP objective will be revised.

## **Fish**

- Comment: Specify goals and objectives for fish habitat.
- Response: Objectives have been added for the PRMP.
- Comment: What is termed fish habitat enhancement is actually restoration or rehabilitation.
- Response: It is enhancement of the current condition, but often is also restoration or rehabilitation.
- Comment: BLM proposes a substantial amount of costly stream habitat restoration. Past restoration work in the Northwest has been poorly designed and has done little to reverse declines of many stocks. Future work should be planned on a 3rd-5th order watershed basis, be based on a thorough pre-treatment inventory, have clearly defined goals and objectives, and have a short and long-term monitoring plan. It should not be a substitute for protecting fish/fish habitat from the effects of land management activities and should not be conducted in watersheds where watershed processes are not functioning naturally or where the effects of public and private land management activities combined will render restoration ineffective. It should be prioritized based on the needs of threatened stocks of anadromous fish.
- Response: Watershed analysis will precede expensive restoration work. An interdisciplinary team will determine actual management prescriptions to achieve watershed standards based on site specific requirements. It has been determined, however, that simple protection of existing aquatic habitat is not enough. Much of the aquatic habitat in the Pacific Northwest is in a degraded condition, thus, aggressive restoration efforts are necessary if depressed fish stocks are to be rebuilt.

The BLM has been in the forefront in developing, monitoring and evaluating habitat restoration projects. These projects have been evaluated not just by the BLM, but in cooperation with Oregon State University, Coastal Oregon Productivity Enhancement Program and the Oregon Department of Fish and Wildlife. Evaluation has clearly shown that restoration projects can increase the survival of salmonids from eggs to smolts. However, recovery of the stocks depends on overall management of the stream and estuary habitat, and the harvest in the ocean and rivers. The BLM has no control over management of habitat on non-BLM lands, nor over fish harvest management.



## Appendix V

- Comment:** The final RMP/FEIS should include a comprehensive stream biological survey, identify watersheds supporting productive or valuable remnant populations or communities of native fishes, amphibians and other aquatic biota, and delineate a well-distributed network of least disturbed watersheds.
- Response:** We recognize the need for this information; however, it is not available at this time nor can it reasonably be acquired in a timely manner for inclusion in the PRMP/FEIS. As a part of implementation of the PRMP, we will move to acquire this data. The BLM has recently released a strategy for the management of anadromous stocks in the Columbia and Snake River Basins which has as a central focus watershed level planning. A similar plan has been developed for the coastal areas of the Pacific Northwest and also includes watershed level planning as a central focus. This plan, which will be published soon, is a road map of how the BLM intends to manage the fisheries of the region to meet the goals and objectives set forth in the PRMP.
- Comment:** Sensitive and priority aquatic habitat should be identified. Recovery and restoration plans should be developed based on a watershed analysis. In addition, fish habitat and sediment yield should be utilized to establish/predict habitat quality. Summarize sub-watersheds where timber harvest emphasis would occur.
- Response:** Priority and sensitive habitats are identified in the FEMAT report and have been taken into account when developing the PRMP. Also see previous response. Sediment yield is not reliably predictable. Watershed analysis will be accomplished eventually on all watersheds and before management actions in key watersheds. Until that level of analysis is complete, it is not feasible to identify sub-watersheds where timber harvest emphasis will occur.
- Comment:** Consider the information on aquatic resources in the Draft Recovery Plan for the Northern Spotted Owl, the Forest Service's strategy entitled PACFISH, and BLM Washington Office Information Bulletin 92-642.
- Response:** We are aware of this information and have considered it.
- Comment:** Identify and discuss the status of various wild anadromous fish stocks and habitat conditions within whole watersheds, not just BLM-administered portions. What is the relationship between habitat conditions and the severely depressed status of many stocks?
- Response:** We actively seek to cooperate with other landowners in developing and implementing plans for management of aquatic habitat. We are cooperating fully with ODFW efforts to identify and protect genetically unique fish stocks, and with management proposals to protect and enhance salmon and trout communities. However, BLM does not have any control over management of habitat on private lands, which is a State responsibility. While we acknowledge that activities on private and State lands may affect habitat on BLM-administered lands, we recognize that private and State lands are managed under State regulations. We have taken these differences into account during impact analysis.
- Habitat condition undeniably plays a role in the depressed status of many stocks, however, many factors other than habitat condition affect fish production (i.e. harvest, ocean conditions, etc.). These factors are not under the control of the BLM.
- Comment:** Analysis of impacts on fish is flawed because it fails to consider management activities on private lands, assumes that past damage will improve on its own, and ignores effects from continued timber harvest in upland areas.
- Response:** See previous response. A component of the methodology used to establish condition ratings was the related factor analysis. This analysis adjusted the condition arrived at using the vegetation information to account for such related factors as the amount of new and existing roading, soil stability, and adjacent land management practices, to name a few.

- Comment: The methodology for stream (fish) habitat quality rating is very simplistic and has not been peer reviewed. The conclusions about existing habitat quality are wildly optimistic.
- Response: We are conducting extensive stream habitat inventories. Analysis of the information obtained indicates a general relationship between the age and composition of the riparian community and the instream woody structure that creates fish habitat. The relationship is far from absolute, as we are aware, but the vegetation is a good general indicator of the overall health of a system. In the absence of detailed data on all streams, we elected to use vegetation information as the best method for approximating stream health. However, this information was not the only information used to establish condition ratings. An equally important component of the methodology was the related factor analysis. See previous response.
- We are aware of the work done on stream ecology on Mt. St. Helens, as well as in other geographic areas. This work was taken into consideration in developing the procedures we used. Analysis in any situation needs to be developed on the basis of conditions in that location, with information on other locations providing only general guidance. The upslope inventory was used as a guide to the age and composition of the riparian vegetation. This does tend to over-state the age and size of the riparian vegetation [in the northern districts] tend to under-estimate these parameters [in the southern districts]. This would result in the classification of some streams as in better (poorer) condition than they actually are.
- This analysis method has been peer reviewed internally but has not received peer review outside the agency. ODFW has reviewed this methodology and provided helpful comments. We recognize that up-to-date stream inventories are needed but funding has been lacking. The data so far collected was used in developing this methodology.
- Comment: The Fisheries Productivity Rating System needs further explanation.
- Response: Refer to Appendix 4-F-3 in the Draft RMP/EIS for a description of the methodology used to calculate fish production capability. Data relating fish production capability to habitat condition was provided by ODFW. This data was considered to be the best available information and appeared reasonable when compared to habitat production capability data the BLM has.
- Our fish production estimates represent the potential capability only. Many factors other than habitat condition affect fish production (i.e. harvest, ocean conditions, etc.) and actual production will vary as a result of these other factors. Since these factors are not under the control of the BLM the actual fish production under a particular Alternative will likely vary from what was predicted. However, the method used does illustrate the relative difference among the Alternatives, thus providing a basis for management decisions.
- Comment: Effects on fish should be measured against a desired future condition, not against current conditions.
- Response: An environmental impact statement normally addresses the changes that alternative courses of action would cause from the present condition. Desired future condition or resource condition objectives, in the planning process, are developed for a specific Alternative. They would differ for each Alternative. The objectives provide the standards for monitoring the effects of the implementation of the plan, while the current conditions establish the baseline against which the effects on fish by the various Alternatives can be measured. Although the FEMAT team made regional comparisons of some of their alternatives against independently derived possible target conditions, those subjective ratings could not be replicated by BLM personnel on a single District basis.
- Comment: The Tables showing potential fish production capability are unproved, most likely inaccurate, and are misleading.

## Appendix V

- Response:** Data used in developing fish production estimates was provided by ODFW. This data was considered to be the best available information and appeared reasonable when compared to habitat production capability data we have collected. However, estimates of future condition for all resources are unproven, the state-of-the-art in resource management make such estimates unprovable. Many factors other than habitat condition affect fish production (i.e. harvest, ocean conditions, etc.) These factors are not under the control of the BLM. Thus, our fish production estimates represent the potential capability only and actual production will vary as a result of these other factors.
- Comment:** The mechanisms by which the 200-year increase in fish populations would occur are not provided. Acute and chronic stressors, such as upstream sediment inputs from unstable slopes, landslides, roads and mining, may continue to degrade fish habitat. In addition, migratory species may be limited by habitat utilized at a single life history stage.
- Response:** The recovery of the riparian zones to healthy, properly functioning condition in respect to large woody debris recruitment, streambank stability, shading, organic input, etc., is considered to be the method by which these increases in fish populations will occur. The 200-year time frame is a reflection of this logic and reflects the length of time that can be expected to be required for full recovery of these riparian zones. It is expected that a healthy, properly functioning riparian area provides all habitat components necessary for all life stages. The related factor analysis utilized in combination with riparian quality to determine habitat condition takes into account such factors as sediment production from roads and upland areas, impacts originating from other ownerships, and other activities on and off BLM-administered lands.
- Comment:** Use of the average diameter of trees to predict fish habitat trends is too simplified. Much more detailed information on stream variables related to fish survival is needed, such as substrate embeddedness, stream temperature, presence of deep pools, dissolved oxygen, sedimentation, etc.
- Response:** These factors were considered when performing the related factor analysis used in combination with the riparian condition method.
- Comment:** There is no discussion of the very real possibility of loss of viability of some aquatic species, particularly anadromous fish stocks of concern. Consider the recent finding by ODFW that their index of coastal abundance greatly overestimated escapement and the status of wild echo stocks may be bleaker than once thought.
- Response:** We are aware of these findings. The SEIS addressed viability of aquatic species. Although we do not manage species, we are cooperating fully with ODFW efforts to identify and protect genetically unique fish stocks, and with management proposals to protect and enhance salmon and trout communities. The riparian and stream management in the PRMP will be adequate to protect existing habitat and to promote long-term recovery of diminished habitat on BLM-administered lands. However, the fate of many fish stocks will be influenced more by activities on other land ownerships and by regulation of fishing. Funding priority for rehabilitation and restoration efforts will reflect stock status.
- Comment:** Identify how closely the expected condition of the fishery resource will approach maximum potential.
- Response:** It is not possible to determine what the maximum potential is and the BLM does not control all factor's affecting fish production.
- Comment:** The lands in the suitable timber base classified as fragile likely represent only the BLM's most erosive and landslide prone areas. Additional fragile lands occur throughout the Coast Range, making most logging and road building potentially hazardous for fish habitat.

- Response:** The most erosive and landslide-prone areas fall into timber production capability classification (TPCC) categories excluded from planned timber harvest. The potential hazards of TPCC categories available for harvest are taken into account during the design of timber sales and associated roads and appropriate measures incorporated to minimize impacts. For further discussion, see previous comment responses on Soils/Site Productivity.
- Comment:** The DRMP spends too much time assuming worst case scenarios on private lands and determining how BLM will mitigate "impacts" rather than proposing creative strategies that get large woody debris back into streams.
- Response:** Forest practices on private lands are less restrictive than those proposed for BLM-administered lands and are generally subject to market fluctuations. As such, it is difficult to include private lands in analyses of effects in conditions other than worse case.
- Management proposed under the PRMP includes projects designed to restore large debris to streams under an adaptive management framework.
- Comment:** What is the status of salmon, steelhead, and trout in the Lower Applegate Analytical Watershed, especially in Cheney and Slate Creeks? Has timber harvest created less than optimum conditions for fish production in this watershed? What kind of work does the BLM plan to do to help recovery of fish habitat in these creeks?
- The number of fall chinook salmon returning to the Applegate River and their spawning range has increased considerably in recent years due to higher, cooler streamflow originating from Applegate Dam. Winter steelhead production remains relatively strong. Returns of adult summer steelhead appear to be slowly declining, probably in response to diversion of water from small spawning streams. Coho salmon populations are severely depressed. Cheney and Slate creeks are two of the better salmon and steelhead producing tributaries in the Applegate River watershed, but produce less fish than historically. ODFW conducts spawning surveys on these streams every year to document relative strength of salmon and steelhead returns to the Applegate River basin. ODFW has constructed fish passage facilities or otherwise improved passage over several migration diversion dams over the years on Slate Creek. BLM constructed a project on Waters Creek (tributary to Slate Creek) in 1983 to improve spawning and rearing habitat for coho and fall chinook salmon. All projects have been highly successful. We intend to add more habitat improvement structures to Waters and Cheney creeks when planning is complete and funding becomes available.
- Most Applegate River tributaries have low to moderate capability for fish production because much of the watershed has been extensively influenced by human activity. Timber harvest and associated road construction is only one of many factors that have reduced potential of basin streams for fish production. Other factors include surface water diversion and wells, removing streambank vegetation on agricultural and forest lands, livestock grazing, erosion from natural surface roads, placer mining and poaching. Natural factors (e.g., streamflow) also limit fish production in some streams.
- Comment:** The Oregon Chapter of the American Fisheries Society (AFS) has developed a strategy to protect remaining aquatic biological diversity in Oregon through a network of watershed reserves, similar to the strategies developed to recover the northern spotted owl. The BLM should obtain the AFS maps and supporting data. The pro-active strategy should be part of an Alternative in the PRMP. The AFS maps have had considerable review and must be considered significant new scientific information.
- Response:** All identified options for fisheries have been incorporated into the existing Alternatives. Creation of a fisheries emphasis alternative would not add additional information to the analysis of the existing situation or of impacts. In addition, BLM's checkerboard ownership in most watersheds limits the effectiveness of watershed protection or rehabilitation measures that are implemented only on BLM-administered land.

## Appendix V

- Comment:** The American Fisheries Society has determined that numerous stocks of salmonids are at risk of extinction in the Medford District. This plan must address each of these stocks and how the particular stock will be affected from management activities in its stream or watershed. If the BLM is truly committed to keeping species off the Endangered Species list, then it must address each stock that is at risk and how logging and other activities will impact that stock.
- Response:** We are cooperating fully with ODFW efforts to identify and protect genetically unique fish stocks with management proposals to protect and enhance salmon and trout communities.
- BLM's Special Status Fish Species list (see Table 3-SP-2) is drawn from several sources: Bureau-sensitive species, Federal listed or proposed threatened or endangered species, Category 1 and 2 Federal candidates, State "sensitive", and from publications by Nehlsen et al 1991 and Nickelson et al. 1992. Species on other lists are not included. Effects of the PRMP on special status species are discussed by subbasin as far as is practicable.
- Comment:** BLM falsely asserts that its limited ownership prevents appreciable effects to fish production in Deer Creek and the Upper Illinois River.
- Response:** BLM manages 10% of the land in the entire Illinois River watershed, but 18% of the land is in the Deer Creek and Upper Illinois River analytical watersheds. Chapter 4, page 4-70 of the DRMP states, "...BLM actions could have an important influence on fish production in the headwaters of several tributaries to these sub-watersheds where most BLM-administered lands are concentrated." On the other hand, it is questionable whether BLM can significantly affect fish production basin-wide, especially in light of poor rearing conditions (e.g., elevated water temperatures, low flow or dewatered streams, unscreened water diversion and competition/predation with nongame fish) in streams larger than fifth order, which could have a major influence on survival of juvenile salmonids produced on public land. Fish habitat protection remains a high priority for the Bureau despite our minor ownership in the watershed.
- Comment:** Is there sufficient planning to protect fishery resources in the Big Butte Creek watershed and the new jobs this enhanced and irreparable fishery can provide?
- Response:** Streams in this watershed will be provided a degree of protection under Option 9 and by utilizing best management practices for a variety of potential activities (see Appendix 2-WA-Draft RMP). Land use practices on other ownerships also affect habitat quality and fish population viability on public land. The Medford District manages only about 20% of the watershed. Factors other than freshwater habitat quality also affect production of anadromous fish, (e.g., sport and commercial fishing and ocean productivity).
- Comment:** In Table 2-18, page 2-104 in the Draft RMP, we see that for the high timber yield Alternatives A and B, there are no acquisition needs for fisheries habitat improvement. Why not? Why are fisheries, water quality, and riparian management kept out of high timber yield options? Timber seems to be the best way to pay for enhancement projects.
- Response:** Land acquisition to benefit fisheries habitat management is not identified in the Alternatives that emphasize timber production because it is not consistent with objectives for the Alternatives (see Chapter 2 and Appendix B, PRMP/FEIS). Land acquisition by BLM is typically accomplished by exchange of other BLM-administered lands; such exchanges forego BLM resource (e.g., timber production from those lands exchanged from BLM management).
- Comment:** Cumulative effects analysis in the Draft RMP fails to briefly describe or integrate cumulative impacts to streams from livestock grazing in the stream habitat quality rating (see Appendix K, PRMP or Effects on Fish, Chapter 4). Cumulative effects of both grazing and logging on Jenny Creek suckers and redband trout also need to be discussed.



- Response: The narrative for rating stream habitat quality has been revised to include grazing effects. Effects of grazing and logging on fish in general, and specifically on Jenny Creek, are discussed in Chapter 3. Grazing is not discussed in Chapter 4 because the DRMP makes no allocations for this activity. There would be no environmental consequences beyond those analyzed in the Grazing EIS.
- Comment: Short-term trends in riparian condition was not quantified to allow the reader to make a reasoned choice among Alternatives. It is questionable whether long-term improvements will ever be realized.
- Response: Expected riparian condition trend could not be quantified for the short-term, because future Interdisciplinary team decisions would determine which timber sale units in the ten-year timber sale in the PRMP would be dropped from further consideration. We state on page 4-46 of the DRMP that riparian condition trend would be downward under some Alternatives and improve slightly under others, depending on RR widths and the amount of land available for timber harvest. Growth of young conifer stands (currently rated minimal or fair condition) in the short-term would be negligible, acres of riparian vegetation in each condition class would not change. On the other hand, Riparian Reserves planned for all orders under Alternative E and Option 9, would have profound positive benefits to riparian condition, if decisions under this RMP remain in effect for the long-term.
- Comment: None of the Alternatives are described as being intended to minimize risk or manage for recovery of this habitat.
- Response: Option 9 is intended to meet these objectives. However, even this Alternative does not provide full protection for intermittent streams outside key 1 watersheds. Intermittent streams comprise about 80% of all stream miles in the Medford District. However, protection afforded under this Option is considerably better than current District policy or Alternative E. Best management practices are also an integral tool for protecting aquatic and riparian habitats (see Appendix 2-WA-1, Draft RMP).
- Comment: It appears fish habitat and riparian surveys are almost nonexistent as compared to the Forest Service stream survey program. And yet in the Draft RMP, you say 40% of streams have been subject to riparian cutting (pp. 4-66), another example of business-as-usual without doing research to see what the consequences of your actions are!
- Response: Adaptive management under the PRMP will require that a greater emphasis be placed on the inventory of riparian as well as other resources. Management activities will be monitored not only for compliance with contract stipulations and adherence to the plan but also to determine if the activity produces or creates desired future conditions and if the results are consistent with the known science.
- Comment: Each logged watershed must have its fish populations monitored each year. A map is needed in the RMP to show where existing index data is being collected and where additional index areas will be placed (Appendix 2-M-I Monitoring Plan, Appendix 2-136). The status of individual populations must be made available to the Pacific Fisheries Management Council each spring, before ocean seasons are set through Magnuson Act procedures.
- Response: Because of expected limitations on funding, it is impractical to monitor fish populations in every watershed with historic or current logging activity. We have tentatively selected four watersheds with little or no management activity to gather baseline data on water quality and quantity, aquatic macroinvertebrates, fish and other aquatic life. Monitoring results from these watersheds would be compared to results from managed watersheds with similar climate, geology, soils, vegetation, etc. Managed watersheds that will be monitored have not yet been selected. We are currently monitoring numerous locations throughout the Rogue River and Cow Creek basins for anadromous fish spawning, macroinvertebrates, and water temperature. A map showing location of monitoring activities is available in the BLM Medford District Office. All information is shared

with other State and Federal agencies. Refer to Appendix 2, pp. 131-136 of the DRMP for more detailed information on planned monitoring activities for streams, riparian zones, and fish populations.

**Comment:** The types of fish habitat enhancement projects over the next decade are generally not enumerated or described in the Draft RMP plans.

**Response:** This type of information would be presented at an activity plan level, such as in a Coordinated Resource Management Plan (CRMP).

**Comment:** The road system and stream system should be integrated at several scales of analysis. The two systems must be analyzed with the region's aquatic resources in mind, not managed as unrelated entities.

The tactical approach of implementing best management practices (BMPs) and relying on the Oregon Forest Practices Act for protection of intermixed private lands is inadequate because logging, road construction, and maintenance are being proposed independent of the watersheds' physical and biological capacity to withstand further impacts.

**Response:** Objectives for road management (see Chapter 2) include considerations for water quality and fish production. Recommendations regarding proposed timber sale units and associated road construction are made by an interdisciplinary team after thoroughly considering information presented by specialists such as watershed, wildlife, and fishery, etc. Existing road density and condition are primary considerations when deciding whether additional road construction is advisable.

**Comment:** The condition class of individual streams should be included in the appendix so that merits of the alternatives for streams in "minimal" condition can be more fully evaluated. Although using mean tree diameter from operations inventory (OI) units next to streams ankle related factors probably provide a reasonably good indication of stream and riparian conditions District wide, the technique provides only an estimate and has its limitations (see DRMP, pp. 3-42).

Site-specific stream and riparian surveys would be conducted in a watershed where management activities are proposed. This data, along with information for other resources, would be reviewed by an interdisciplinary team before a decision is made to proceed with, modify, or abandon a proposed action.

**Comment:** BLM has assumed too much responsibility for declining fish populations. There is no scientific proof that quality of freshwater habitat is a major factor responsible for the decline of anadromous fish populations.

**Response:** It's true that factors other than the quality of freshwater rearing and spawning habitat influence production of anadromous fish. Kaczynski and Palmisano (1993) suggest logging is not a significant factor in the decline of many fish populations. However, this work was not peer reviewed and conflicts with views of most fishery biologists. The decline of our valuable fish stocks is a complex problem that will require a complex solution with full participation by all landowners using techniques and practices that have a sound scientific basis.

**Comment:** BLM mentions the potential for activities on other ownerships to adversely affect stream condition on BLM-administered lands but does not acknowledge that BLM activities could degrade stream habitat on private land.

**Response:** The narrative for stream habitat quality rating methodology has been revised to clarify this. There is no question that historic BLM riparian management, tractor logging, and road construction practices have adversely affected some streams flowing through private and BLM-administered lands. However, BLM's current standards for these activities are much higher and are

implemented more consistently than in the past and, although imperfect, usually minimize adverse effects on aquatic and riparian habitat.

**Comment:** BLM uses flawed logic for estimating current and future trends in quality of fish habitat. The BLM arbitrarily eliminates the possibility that fish habitat quality could be declining by considering all logged habitat to be stable or slowly improving.

**Response:** BLM agrees that there is no substitute for field studies to determine habitat trends. Data must be collected over long time periods (e.g., 20 years minimum) in control watersheds to capture the range of natural variability. However, our funding to conduct such monitoring has been extremely limited. We intend, as part of the PRMP implementation, to aggressively pursue adequate funding on an annual basis, and to conduct watershed/stream/fish population monitoring.

Our predictions of improved stream condition over the long-term reflect a lower intensity of timber harvest activity, better riparian habitat management on public lands, and the probability of strengthened regulations that govern forest practices on other ownerships. However, without detailed, site-specific data, we cannot estimate where specific streams would be on the habitat recovery curve.

**Comment:** BLM recognizes that elevated water temperatures and stream sedimentation can limit fish production, but does not model their effects on fish production. The analysis relies too heavily on coarse woody debris as an indicator of effects on fish, rather than on sediment and temperature.

**Response:** A thorough discussion of the potential effects of elevated water temperature and sediment on fish and aquatic macroinvertebrates is in Chapter 4. BLM management would not contribute to elevated water temperature under any alternative, except the NA & A. RMAs would be sufficient to lower elevated water temperatures unless they originate from natural conditions or from past or current activities upstream. BMPs for road construction and other soil disturbing activities would be implemented, on a site-specific basis, to minimize entry of sediment into streams. Insufficient data is available to model sediment contribution from roads and other sources in the short-term. It is also impractical to model sediment input into streams over the long-term, (e.g., 200 years) and predict its effect on aquatic communities with any degree of certainty. On the other hand, source distances for coarse woody debris that enters streams has been fairly well quantified (McDade et al 1990; Murphy and Koski 1989). The time required for woody debris levels to recover the prelogging conditions (Heiman 1988) has been documented and is thoroughly discussed in Chapter 4. This is the reason why coarse woody debris was used as an indicator of differences among alternatives which generally vary in RMA widths. Levels of coarse woody debris can directly influence the quality of aquatic habitat, affecting fish and other aquatic organisms.

**Comment:** It is shocking to find out that 65% of the streams that support salmonids and trout, and that 65% of all existing fish habitat are in fair to minimal condition. This is especially shocking, when one of the beneficial uses of these streams, as prescribed by the State of Oregon, is protecting and improving spawning habitat for salmonids.

**Response:** It is BLM's policy to meet or exceed State water quality standards. A memorandum of agreement between BLM and the Oregon Department of Environmental Quality (DEQ) delineates BLM's responsibilities to meet minimum requirements of the Forest Practice Rules. BLM's riparian management practices and road construction standards exceed legal minimums and have improved substantially within the last 20 years. Unfortunately, stream and riparian habitats recover slowly, often requiring several decades if not affected by other factors.

**Comment:** The proposed direction will maintain shade on 3rd order and larger streams but not much else, this is important, but does not insure high quality fish habitat. The proposed direction for 1st and 2nd order streams is inadequate. The functioning of these numerous small channels is critical in determining the overall health of the watershed. BLM should provide for no-cut buffers on intermittent streams, unless it is determined site-specifically by a resource specialist such as a

fisheries biologist, hydrologist, soils scientist, or geologist that harvest is consistent with stated goals and objectives.

**Response:** Riparian reserves for intermittent, perennial, and fishery streams under the PRMP are considerably wider than proposed under the Preferred Alternative in the DRMP. Vegetation within riparian reserves can be manipulated if it is consistent with goals established for riparian habitat in a specific watershed. A management plan must be written by a team of resource specialists for each subwatershed before any action is allowed in RMAs.

**Comment:** The first paragraph in Appendix 4-19 of the Draft RMP describes the difficulty of preserving soil productivity and the fragile nature of forest soils. Yet 56,000 acres (more than 1/4 of the land proposed for logging in the Draft RMP) is classified fragile due to slope steepness, instability, and erosion potential. This will severely impact salmon spawning and rearing habitats due to increased landsliding and excessive sedimentation.

**Response:** The potential hazards are taken into account during the design of timber sales and associated roads. Appropriate measures which include best management practices (BMPs), are incorporated to minimize impacts.

**Comment:** Much of the discussion on riparian management areas is based on value judgements and subjective information, rather than sound, scientifically credible data.

**Response:** Our understanding of the interrelationships of vegetation, fish, and wildlife in riparian areas is in its infancy. However, a great deal of information has become available in recent years (McComb and Hagar 1993; Salo and Cundy 1987; Sedell et al 1988). Fish and wildlife populations respond to a variety of environmental stimuli. Their responses to management activities, such as timber harvest, cannot be readily quantified.

**Comment:** We question the estimated riparian condition findings shown on Table 3-RZ-I, on pp. 3-42, in the Draft RMP, for stream orders 2 through 9. We feel that the BLM is making extremely conservative judgements regarding these conditions. To our knowledge, there is no empirical data that support these findings. We believe that the riparian and stream channel conditions are much better than estimated. Member foresters work on much of the ground on and surrounding BLM-administered lands and are very familiar with watersheds that have been reviewed in the plan. The consensus is that while there are some problem areas, the majority of the watersheds on BLM-administered land are in good shape and far from the high percentage of minimum and fair ratings.

**Response:** We acknowledged in the Draft RMP, that using mean tree diameter from operations inventory units (which are primarily in upland areas) to estimate condition of riparian vegetation has its limitations. However, we lack site-specific information for streamside vegetation. Despite its limitations, we believe it provides a reasonably good approximation of riparian tree diameter, which in turn suggests the extent of disturbance by fire or timber harvest. Riparian habitat in good/optimal condition exhibits a variety of characteristics that benefit aquatic and terrestrial species. Older forests exhibit greater vertical and horizontal structural diversity, and more species of vegetation and wildlife, than in young forests. In summary, well-vegetated streambanks do not necessarily constitute good riparian habitat.

**Comment:** Using State water quality standards as a surrogate for identified fish habitat objectives or achievement of a clearly stated DFC's, is a common practice that has led to the severe and widespread fish habitat degradation that we now face. The BLM should clearly disclose the cumulative watershed effects analysis procedure it proposes to use. At present, the analysis appears undirected, fails to consider fish and fish habitat, and is simplistic. To be credible, the process must be peer reviewed and deemed acceptable. Failing that, the analysis results, conclusions, and ultimately land management decisions, are fatally flawed.

- Response: The watershed cumulative effects analysis used for the DRMP/EIS is described in Chapter 3, Water Resources and Appendix 3-WA-9 and in Chapter 4, Water Resources and Appendix 4-WA-3.
- Comment: Wild anadromous fish populations have declined precipitously in recent years. Update Table 3-F-2 to reflect current population status of wild stocks in subbasins, rather than in large watersheds.
- Response: It is true that freshwater escapement of virtually all anadromous fish stocks in the Medford District have been below the long-term average the last several years. It's also true that near-record numbers of fish of most stocks returned to spawn in the late 1880s. Notable exceptions include coho salmon throughout the Rogue River basin, Illinois River winter steelhead, and Illinois fall chinook salmon. Poor returns in recent years, are primarily the result of unfavorable ocean conditions. Commercial and sport fishing, and freshwater habitat problems, also influence mn strength. Poor returns in recent years, with the previously noted exception, may or may not indicate future returns.
- BLM is committed to maintaining fish population above minimum viable levels regardless of fish population trends. BLM does not manage species, but does manage the habitat on which the species depend. Current population data for wild fish stocks in the Medford District is available through ODFW's regional offices in Roseburg, and in Medford.
- Comment: Table S-2, pp. XVI, in the Draft RMP, shows water quality declining in 11 watersheds during the initial 10 years under the PA. Discuss potential losses of fish production in relation to stocks of anadromous fish that are declining.
- Response: This subject is discussed in Chapter 4, Effects on Fish, in the PRMP.
- Comment: I am still not clear what to expect from the coordinated watershed management plans for the priority watersheds identified: Jenny, West Evans, and Cow creeks, and the Illinois River. While the focus may be on special status fish species, it sounds like the habitat guidelines will be more stringent than that for all Medford District streams. The Nature Conservancy would support stronger protection for these priority watersheds, perhaps more in line with those identified, for withdrawal from management actions for a decade.
- Response: Riparian reserves on perennial and intermittent non fishery streams would be wider in key 1 watersheds than in other watersheds. There would also be restrictions on additional road construction in these areas. It is correct that forest practices in West Evans Creek, the Upper Illinois River, and Cow Creek (except in the LSR in Upper Cow creek) would not differ from other watersheds. Upper West Evans and Cold creeks (in the West Evans watershed) would be deferred from management activities for the next 10 years.
- Comment: Why were Illinois River fall chinook salmon dropped as a Special Status Species?
- Response: According to ODFW, listing lower Rogue River (originating downstream of Agnes) fall chinook as a sensitive species was not intended to include Illinois River basin fish. BLM initially interpreted the ruling otherwise. Concern for this stock remains high among ODFW, USFS, and BLM biologists. ODFW formally recognized this fish stock as being "depressed" (Nickelson et al 1992) soon after the Draft RMP was published. This fish stock is now considered a BLM Special Status Species and is included in Table 3-SP-2.
- Comment: Illinois River winter steelhead were petitioned for listing under the Endangered Species Act on May 6, 1992. The BLM should develop comprehensive plans to restore this fish population and others with depressed populations.



## Appendix V

- Response:** The National Marine Fisheries Service denied the petition to list this fish stock as threatened or endangered because it did not meet criteria for a genetically-distinct stock. However, poor habitat conditions continue to plague this fish run. The Medford District manages 10% of the Illinois River basin watershed and cannot restore this depressed fish population by ourselves. We have identified a need in the PRMP to develop a coordinated resource management plan (CRMP) for the Illinois River watershed in cooperation with National forests, private landowners, Oregon Department of Fish & Wildlife, and interested citizens. This coordinated plan would address the needs of all native fishes in the watershed.
- Comment:** Watersheds selected for long-term monitoring should be based on geographic units that provide habitat for genetically-distinct fish stocks. The four small control watersheds identified in Appendix 2-132 are inadequate.
- Responses:** BLM recognizes the desirability of using this approach. However, few watersheds in the Medford District are without human-related disturbance. The four small control watersheds, identified in the monitoring plan, represent our best opportunities for monitoring water quality and quantity, hydrologic response to natural conditions, and biological communities in settings that are minimally influenced by human-related activities.
- Monitoring watershed characteristics (e.g., fish and water quality) on too large of a scale (i.e., a basin rather than a subwatershed) in a mixed ownership stream basin could tend to mask changes that result from BLM management activities (or from a lack of activity).
- Comment:** The time periods used for long-term impact analysis should be consistent throughout the Draft RMP.
- Long-term impact for seral diversity and effect on "riparian" wildlife species was set at 100 years (pp. 4-23, 4-53), but long-term impacts for riparian vegetation and fisheries habitat was set at 200 years (pg. 4-46, Appendix 4-F-4). The longer period purposely was selected to exaggerate expected improved conditions. The BLM has not been able to document stream trends during the past 25 years. How can they possibly make any credible claim to predict beneficial impacts 200 years into the future? Furthermore, the analysis does not demonstrate that special status aquatic species will survive the next 200 years.
- Response:** Two hundred years was selected for the long-term period because optimum loading of coarse woody debris in streams and maximum sustainable fish production in old-growth forests would be achieved during that period of time. This assumes other factors such as drought, and activities on other ownerships do not adversely affect stream conditions and aquatic life on BLM-administered lands. It is doubtful whether any model will ever be able to demonstrate that special status species will survive the next 20 years, let alone the next 200 years.
- Comment:** We have major concerns about the adequacy of the monitoring plan regarding fish and fish habitat. We feel it contains very poorly defined objectives/goals and is very non-specific as to what will actually (be) done, by whom, and what are the "thresholds" whereby some change will be made. We feel monitoring is critical, and projects should not be undertaken if monitoring cannot be done. We strongly feel that Final plans will need major improvements. We strongly feel that BLM will need to do a lot more than monitor one stream per RA. BLM will need to do a lot more than monitor one stream per RA. Additionally, the monitoring plan will need to be measured against very specific and quantifiable standards. We strongly recommend that BLM adopt a process similar to the Forest Service's Program Implementation Guide (PID) for management of the Columbia Basin anadromous fish stocks.
- Response:** Monitoring standards for fish and fish habitat will be established by the SEIS Monitoring and Evaluation Plan.

## Special Status Species

- Comment:** Note the current status of species-specific management plans. Clarify whether site -specific management plans will be developed for the bald eagle and peregrine falcon, and when.
- Response:** These are interagency plans developed between BLM, USFS and USF&WS, which identify and schedule specific management actions to prevent listing and to conserve these species. The objectives of the recovery plans for the bald eagle and peregrine falcon are the basis of BLM management. Plans will be developed and maintained using information from applicable watershed analyses.
- Comment:** Indicate what measures (inventories, buffers, site-specific management plans, consultation with the Fish & Wildlife Service, etc.) will be implemented to assure that actions such as timber harvest, road construction, grazing, recreational use, and development, do not adversely affect listed species.
- Response:** Federally listed species and/or their habitat will be managed in compliance with the Endangered Species Act and BLM national and State Office policy, which will include conferencing and consultation with the U.S. Fish & Wildlife Service. For species with completed recovery plans, management activities will be consistent with the plans objectives. Inventories and identification of buffers, seasonal restriction, and other project modifications are part of the process to ensure that actions are in compliance.
- Comment:** Identify the species expected to benefit from the OGEAs and how the OGEAs will contribute to habitat, forestalling listing, and/or delisting of each species.
- Response:** Reserves were not specifically intended to benefit special status plants. All special status plants, except for assessment species, will be managed in a way that will not contribute to the need to list, regardless of land allocation.
- In general, animal species that will benefit from the LSRs are those whose daily and annual life cycle needs require habitat components provided in late-successional conifer forests. Those species are identified in Appendix G. Some of these are currently Federally-listed species, some are candidates for listing and others are not now, nor will they probably ever be, in need of listing protection, but all benefit from the habitat conditions inherent in the reserves. For example, the reserves follow the intent of the Designated Conservation Areas of the Final Draft Northern Spotted Owl Recovery Plan. This plan and its components are designed to recover the spotted owl populations, but also provide habitat for a host of other species where their occurrence is in common. The LSRs are large tracts that will eventually have significant acreages of older forest. Species such as the marbled murrelet, goshawk, bald eagle, (where the Reserves are near water bodies) salmonid fishes and numerous species of small mammals, birds and amphibians will be able to sustain populations in these areas. A given reserve may contain several populations of a given salamander species, while for more far-ranging species such as the goshawk and spotted owl, it may require multiple reserves to serve the needs of a population. Key items in the Fish and Wildlife Service's review of whether a species should be listed or delisted, are whether the habitat of the species is being lost, and whether there are regulatory mechanisms in place to protect the species. The reserves serve as cornerstones for nesting both of these items of concern and thus should weigh heavily in the listing/delisting considerations. The viability ratings in the SEIS also provide an indirect identification of species expected to benefit.
- Comment:** The Federal status of several species is incorrectly noted.
- Response:** The Special Status Species list has been corrected and updated.
- Comment:** Consultation under the Endangered Species Act, regarding effects of activities on mining claims on Federally listed threatened and endangered species, is the responsibility of BLM.

## Appendix V

- Response:** Consultation with USF&WS for mining is the responsibility of the claimant if there is a Notice of Intent in place. It is the BLM's responsibility if there is a Plan of Operation filed. However, we would certainly be in contact with the USF&WS in both cases, regardless of responsibility for consultation.
- Comment:** A minimum viable population of a species is on the brink of catastrophe. Managing special status species for populations above the minimum is recommended.
- Response:** Our goal is to manage for healthy populations of all fauna and flora, including special status species, by employing policies, land use allocations, and management direction that will ensure stable populations.
- Comment:** Inventory sensitive wildlife species.
- Response:** Inventories are an ongoing process but are not a standard decision element of an RMP. Wildlife inventories are very expensive and thus subject to budget constraints.
- Comment:** The DEIS violated NEPA by failing to adequately analyze the effects of the RMP on marbled murrelets, songbirds, declining amphibians, western pond turtles, many important species of plants sensitive to disturbance and candidates for the endangered species list.
- Response:** In the RMP/EIS, those effects are analyzed at a level of detail consistent with what is known about the habitat needs of the many species at issue. They are also analyzed in the SEIS. Monitoring is a critical component of the PRMP and will increase our knowledge of habitat needs. This information will be used to adjust management strategies whenever necessary in order to ensure that management objectives are achieved.
- Comment:** Provide clear direction for site-specific protection of other Oregon sensitive (wildlife) species. The preferred alternative should contain allocations and management standards for bald eagles, peregrine falcons, wild turkeys, Townsend's big-eared bats, great blue herons, and band-tailed pigeon mineral springs. It should also commit to develop site-specific habitat management plans for each known site and other sites as they are found.
- Response:** The PRMP contains management direction for various wildlife species. In many cases, allocations such as reserves and special management areas will provide habitat for wildlife species. The concept of ecosystem management is to provide habitat sufficient to meet the needs of all wildlife species rather than to provide species-by-species allocations. Chapter 4 provides species-by-species discussions of how the allocations will serve the species. Where the RMP allocations and prescriptions are not sufficiently detailed to guide management of these species, habitat management plans will be prepared.
- Comment:** The treatment of marbled murrelets is inadequate.
- Response:** The discussion of marbled murrelets was expanded in the PRMP/FEIS.
- Comment:** Commit to a process for identifying all marbled murrelet nesting habitat and flight corridors, in consultation with the US Fish and Wildlife Service. Help fund and accelerate research on murrelet use of BLM-administered habitat.
- Response:** Provisions in the PRMP call for general inventories of BLM-administered lands for murrelets. Additionally, within an area currently 35 miles from the Pacific Ocean, projects which might effect murrelets would be surveyed to protocol. At the present time, protocol requires two years of site visits. Lands where murrelets occupancy is confirmed will be unavailable for planned timber harvest. Research on marbled murrelets is a priority.
- Comment:** Clearly state the impacts on marbled murrelet habitat on BLM lands, not merely the overall future conditions on all lands.

- Response: Impacts to the identified marbled murrelet habitat on BLM -administered lands are specifically addressed in Chapter 4.
- Comment: Analysis of murrelet habitat loss should consider areas of mature forests with some old-growth trees as possible murrelet habitat.
- Response: The definition of potential marbled murrelet habitat includes mature stands with scattered old growth trees, thus that acreage was included in the analysis of effects should be included on the list of Special Status Species.
- Comment: All potentially threatened stock of wild anadromous fish on BLM-managed lands should be included on the list of Special Status Species.
- Response: A list of native fish stocks, which we have determined merit special management consideration, has been prepared and can be found in Appendix G of this PRMP/FEIS.
- Comment: Take a more active role in improving habitat for sensitive fish species and stocks. Describe more completely how the Preferred Alternative will affect sensitive fish stocks and how adverse impacts would be mitigated.
- Response: The BLM does not manage species or communities, mean manage the habitation which these species depend. We are cooperating with ODFW efforts to identify and protect genetically unique fish stocks, and with management proposals to protect and enhance salmon and trout communities. Habitat restoration is an important component of the PRMP. We also have an extensive monitoring program for salmon and steelhead.
- Comment: Identify all existing sites for listed and candidate plant species. Work with other State and Federal agencies to prioritize their study and monitoring.
- Response: All existing known sites for listed and candidate species are mapped in our GIS. As new sites are discovered through inventory they will be added to the GIS. Inventory will continue throughout the life of the plan. Extensive coordination already occurs with State and Federal agencies and private organizations. Memorandums of Understanding and/or Cooperative Agreements have been developed with the Oregon Department of Agriculture, the Oregon Natural Heritage Program, The Nature Conservancy, and the Center for Plant Conservation.
- In addition to Memorandums of Understanding and Cooperative Agreements, interagency management plans, called Conservation Agreements, are being developed between all Federal landowners throughout a species range. Cost share agreements are in place for studying and monitoring many listed and Federal candidate plant species.
- Comment: Discuss the effects of management alternatives on special status plant species similarly to the discussion of effects on special status animal species. Bureau sensitive plant species get too little attention. Use the ONHP list for identifying habitats of plant species that could be come threatened or endangered.
- Response: Special status plants are not discussed individually because of the large number of special status plants and the limited amount of information available on their biology. More research is needed before more can be said. The ONHP list provides only species names and status and cannot be used to identify habitats. Location information for the District which is stored in the ONHP Element. Occurrence Database was provided by BLM personnel. Location information is exchanged between the ONHP and the BLM on an annual basis under a Memorandum of Understanding and Cooperative Agreement.
- Comment: All plant species on the Oregon Natural Heritage Program sensitive list should be considered in the PRMP/FEIS. Standards addressing the protection of ONHP sensitive species and their habitats should be included in all land use allocations. The orientation of management for

sensitive species should shift from individual species and habitats to ecosystems.

**Response:** Plant species occurring on BLM-administered land which are identified as threatened or endangered on the ONHP's sensitive lists, are addressed in the PRMP/FEIS. Species on the ONHP's four sensitive lists have widely varying needs for management. The BLM Oregon State Office Special Status Species policy includes all plant species in the ONHP lists, according different levels of attention based on the species' sensitivity. Plant species on BLM-administered land which are threatened or endangered throughout their range (ONHP List 1), are Federal candidate or Bureau sensitive species, those threatened or endangered in Oregon but more stable or abundant elsewhere (List 2) are BLM Oregon/Washington assessment species and are addressed in the PRMP/FEIS. Plant species on List 3 ("review") and on List 4 ("watch") are BLM Oregon/Washington tracking species. They are identified by ONHP as species needing more information (List 3) and as being of concern, but not presently threatened or endangered (List 4). When funding permits, we would collect information on tracking species, but special management is not planned.

The PRMP provides management direction for those species considered in jeopardy' of extinction and in need of special management attention. This includes Federally listed, Federally proposed, Federal candidate, State listed, and Bureau Sensitive species. These species were identified from U.S. Fish & Wildlife Service lists of federal listed, proposed, and candidate species, State of Oregon lists of state listed and candidate species and ONHP lists. Management strategies for special status plants do not vary with land use allocation in the PRMP. The PRMP will provide for ecosystem management to protect special status species.

**Comment:** To follow State and Federal guidelines, rare plant habitats should be "protected" rather than "managed".

**Response:** Proposed management prescriptions are in full compliance with all State and Federal guidelines. "Protection" alone will not be sufficient for maintaining many plant species. Active management such as prescribed fire may be necessary to maintain or restore the structure and function of certain plant habitats.

**Comment:** We urge the BLM to refrain from use of fertilizer in areas where it could possibly damage or cause imbalance in the habitat of special status plant species.

**Response:** These effects will be considered in a site specific NEPA Environmental Assessment document before a fertilization project is done.

**Comment:** The Medford District has one of the most active and mature sensitive plant programs in the Oregon BLM, yet it doesn't seem to receive near the attention that the rare animal program does. Nevertheless, in the discussion in Chapter III of Special Status Species (3-54), plants seem to get less attention in the RMP at least when measured by column of text (admittedly a questionable measure). There are no plant species that get such attention in the RMP even though there are a number of deserving candidates.

**Response:** All federal candidate plant species and SEIS vascular plant species known to occur on the Medford District are discussed in chapter III of the PRMP.

**Comment:** The monitoring of special plant species needs to be addressed in more detail. How will BLM track the condition of sensitive plant populations in a scientifically valid way? On page 3-54, it is stated that "The planning area is within one of the most botanically diverse areas in the state." How are these botanical resources being monitored?

**Response:** Monitoring has been on-going on the known federal candidate species since 1984. This is very basic monitoring to gain some baseline knowledge on their life history. In addition, as management strategies are developed in conservation agreements with USF&WS for federal candidates, monitoring plans are being developed as part of these agreements.



Comment: The concept of "Special Status Species" presented in the RMP/EIS is much too limited. It addresses only those species with current or proposed listing status under the Endangered Species Act. We believe that all plant species on the Oregon Natural Heritage Program (ONHP) sensitive list that occur in your area should be considered in the RMP/EIS. Unfortunately, these "inventories" may not be thorough, or may be conducted when the plants are difficult to recognize. We believe that an inventory of sensitive plant species occurring in the Medford BLM District should be systematically conducted.

Response: The PRMP/EIS addresses all species on the ONHP list that might occur on the Medford District. In addition, it includes all the SEIS species. The district is beginning a more systematic inventory system with the concept of watershed management.

The PRMP provides management direction for those species considered in jeopardy of extinction and in need of special management attention. This includes federal listed, federal proposed, federal candidate, state listed, and Bureau Sensitive species. These species were identified from U. S. Fish & Wildlife Service lists of federal listed, proposed, and candidate species, State of Oregon lists of state listed and candidate species and ONHP lists. Management strategies for special status plants do not vary with land use allocation in the PRMP. The PRMP will provide for ecosystem management to protect special status species.

Comment: O'Brien Road includes important plant habitat that has not been fully inventoried. The complex terrain combines plants of wetlands (*Darlingtonia* and ladies' slipper orchid) with those of dry serpentine sites *Dicentra formosa* ssp. *oregano*, *Cardamine gemmata*. An ACEC would afford better protection.

Response: We are aware of the important plant habitat along the O'Brien Road. The plants in the area will be managed under the 6840 Regulations which are to prevent listing. While an ACEC would afford more specific management to the area, it was not nominated as an ACEC and therefore was not valued as such. The District recognizes the importance of the Illinois Valley for rare and endemic plants and proposes in the PRMP to designate all BLM lands in the Illinois Valley as a Botanical Interest Area. While this designation does not carry any specific management guidelines, it alerts BLM land managers and the public that this is an area which is botanically unique and first consideration should be to these plants' habitat.

Comment: ...the State believes that BLM should consider the recommendations noted below.

- a. BLM needs to expand the inventory of its lands to identify all existing sites for listed and candidate species, including areas not currently slated for timber sale or harvest. BLM should work with other state and federal agencies to prioritize the study and monitoring of listed and candidate species to best facilitate knowledge of habitat requirements.
- b. Prioritized management plans should be developed for special status plants that outline how particular species will be protected, especially those located in land allocations that allow timber harvest and domestic grazing. Emphasis should be placed on improving or restoring critical habitats rather than merely maintaining existing, often degraded conditions.
- c. Long-term monitoring of special status species, especially listed plants, is essential to determine whether plant populations are recovering or declining. Recent advances in technology should be used to develop monitoring programs.
- d. Maintaining species at the level of minimum viable populations may not be sufficient to guarantee survival over the long- run. It is important to recognize that a minimum viable population is essentially on the brink of catastrophe, therefore, population levels above the minimum are recommended.

## Appendix V

- Response:** The Medford District is expanding its inventory for special status plant species as funds and budgets are available. We do work with both state and federal agencies in prioritizing and developing monitoring plans for candidate species; at this time, we do not have a listed plant species. We are developing Conservation Agreements (CAs) with USF&WS that outline how we will manage specific species to prevent listing. This will include improving and restoring critical habitat, long-term monitoring and maintaining species' populations above minimum viable population levels.
- Comments:** We urge the BLM to place restrictions on mineral entry to protect special status species, especially special status plants on serpentine soils.
- Response:** The BLM has limited jurisdiction in restricting mining activity. However, placing restrictions on mining activity is one tool the Bureau will consider using as necessary to protect and manage special status species habitat.
- Comment:** Special Plant and Tree Species. More attention needs to be given to monitoring tree population and geographic distribution of special status species. The preferred alternative needs to identify specific actions (prioritize and develop management plans) that will be undertaken to improve and restore habitat for state and federally listed and candidate plant species.
- Response:** Chapter 2 of the PRMP addresses this more fully.
- Comment:** Pages 3-58 to 3-64. Special status plant species need to be described in detail as animal species are. People are less familiar with plant species.
- Response:** Special status plants that are federal candidates or SEIS Special Attention Vascular Plants have been described in detail in the PRMP.
- Comment:** Lincoln wetlands support three federal candidate species. *Plagiobothrys figuratus* was feared extinct and rediscovered there. The largest, most vigorous population of *Limnanthes floccosa* ssp. *bellinganana* grows in the wet meadows. At a time when *Limnanthes* species are being investigated botanically and agriculturally as potential new crops for Oregon, wetlands habitat is shrinking because of development and cattle grazing.
- Response:** Habitat for these federal candidates at the Lincoln site is being managed to prevent impacts to them. A Conservation Agreement (CA) to be signed by the BLM and USF&WS is currently being written for *Limnanthes Poccosa* ssp. *bellinganana*. CAs are management plans that are designed to manage species so they will not need to be listed. Development and cattle grazing will be analyzed in the CA.
- Comment:** We strongly urge that all known sites with special status plants be withdrawn from the timber base. This would be the best way to promote biological diversity on BLM lands.
- Response:** All known sites for special status plants have been withdrawn from the commercial forestland base.
- Comment:** Special status areas should provide protection to federal candidates. Again, the health of the forests impacts timber production sustainability and therefore, species must be maintained because their presence indicates forest health. The RMP should demonstrate the justification for the failure of the PA to include the mitigation measures included in Alternative E. For instance, the PA should provide for a 300-foot buffer around each known sensitive plant species. Avoiding the listing should be the goal and not merely dealing with the species after the listing.
- Response:** Avoiding listing is the goal of the Special Status Plant program in BLM. Buffers are included for special status plant populations in the PRMP.

- Comment: Siskiyou Pass area contains oak-juniper plant communities that should be recognized and preserved within the Oregon Natural Heritage Plan.
- Response: The BLM contracted with the Nature Conservancy for inventory of potential plant communities that fit within the Oregon Natural Heritage Plan. An oak-juniper plant community in the Siskiyou Pass was not identified.
- Comment: The Preferred Alternatives in the Final Plans should contain a standard set of land allocations and management standards for each of these (Special Status) species. These standards should be developed using the expertise of species specialists. Standards should specify where vegetative manipulation is an option.
- Response: We have taken the approach of ecosystem management, rather than single species management. Habitats will be managed so as to produce a variety of seral stages and habitat components that meet the needs of all species. Thus, specific objective for individual species are not identified. However, the PRMP has identified land-use allocations and/or management direction for some species or species groups when scientific knowledge permits identification of appropriate standards to supplement ecosystem management. Many of those standards were developed for the SEIS and included in its ROD.
- Comment: Clearly define the scope and criteria used for site-specific protection of species that may be threatened or jeopardized by timber harvesting activities within all the land use allocation categories.
- Response: Management direction for the Proposed RMP has been expanded to address this.
- Comment: Your management regime for spotted owls and marbled murrelets should be designed to meet at least minimum provisions of the U.S. Fish and Wildlife Service recovery plans.
- The Proposed RMP is designed as a BLM implementation of the Final Draft Recovery Plan for the northern spotted owl. It varies from an exact interpretation of the Final Draft Recovery Plan due to be consideration of other resources. There is currently no recovery plan for the marbled murrelet.

## Northern Spotted Owl

- Comment: While the long-term conditions are of interest, the short-term impacts and an evaluation of conditions at the "lowest" point are critical to assessing the impact to the species. This section should include a discussion of short-term and medium-term effects, and the lowest point.
- Response: The discussion has been expanded.
- Comment: Though it has been said that owls nest only in old growth, they are now finding owls nesting in younger trees as well.
- Spotted owls have been found to nest in younger forests with significant older forest structural characteristics. Recent regeneration harvests, especially clearcuts, have not retained these structures, including large retention trees, numerous snags, and large amounts of down woody debris.
- Comment: As time goes by, the numbers of known owls or pairs of owls keep rising and as of now the number of owls known to exist far exceed the numbers that were estimated to be in the past.
- Response: It is true that the known number of spotted owls has increased in recent years. This is primarily due to the much increased intensity of survey efforts during the breeding season. The apparent increase in population size does not contradict the projected decline of the species range-wide. Neither does the number of known exceed estimates from Thomas, et al (1990) or the Final Draft Recovery Plan.

#### *Appendix V*

- Comment:** Due to the controversy surrounding the type of science being employed, the BLM's documentation must disclose not only the assumptions used in estimating land management impacts on the species, but the associated level of confidence as well.
- Response:** Some of the documentation is listed in Appendix 4-SP-1 of the Draft RMP/EIS. Additional documentation has been provided in the SEIS.
- Comment:** Provide an indication of how the Residual Habitat Areas will be placed on the landscape and the reason they are only provided for 8 decades.
- Response:** Although no longer called Residual Habitat Areas, they are allocated as 100 acres of the best suitable habitat around known sites as of January 1, 1994, that fall within the Matrix. The 8-decade deferral is no longer proposed; they are now reserves.
- Comment:** There is no scientific evidence that the forest structure needed as spotted owl habitat can be grown over time using long rotation forestry.
- Response:** Although the evidence may not be complete there is promise, that long rotation forestry may produce suitable spotted owl habitat. For that reason the BLM has initiated research to aid future forest managers who will deal with the issue in the next century. The BLM will maintain all suitable habitat in Late-Successional Reserves and foster old growth forest conditions in the current young forests in the Late-Successional Reserves as they mature.
- Comment:** Address management direction for timber sale areas exempted by the Endangered Species Committee in 1992.
- Response:** The BLM will not pursue the harvest of any of the previously planned timber sales exempted by the Endangered Species Committee. Harvest may occur at a future time on the same land acres, but the prescriptions will not jeopardize the continued existence of the spotted owl or any other Federally-listed species.
- Comment:** Identify the standards under which known spotted owl nest sites will be protected.
- Response:** At a minimum, at least one center of activity at all known sites of resident single and territorial pairs of northern spotted owls known as of January 1, 1994, will have up to 100 acres of the best available surrounding habitat deferred from timber harvest. Obviously, sites that fall within reserves or SMAs would have more acres protected surrounding the site.
- Comment:** Clarify whether surface occupancy for mining activities will be allowed in northern spotted owl sites.
- Response:** As a general rule, disturbances such as surface occupancy, would not be authorized within 0.25 miles of a northern spotted owl site. This will, however, vary by site and by season of the year, so it is not an absolute exclusion. In instances where the mining activities can occur in harmony with the owl occupancy of the site, efforts will be made to accommodate the mineral resource use.
- Comment:** BLM proposed inappropriately to provide connectivity for spotted owls managing connectivity areas.
- Response:** The purpose of connectivity/diversity blocks is to serve a variety of wildlife species, not only spotted owls. Connectivity/diversity blocks, along with other allocations such as Riparian Reserves and Special Management Areas, are expected to mix with the General Forest Management Areas to provide for dispersal of many species, including spotted owls.
- Comment:** Explain how the connectivity areas compare to the 50-11-40 rule outlined in the ISC report.

- Response:** Connectivity and the objectives of the 50-11-40 guideline are treated in two ways on Matrix lands within the Medford district. Areas to be managed under the southern prescription will meet or exceed the 50-11-40 guideline and provide connectivity for wildlife species by the design of the system. While in the short term many areas to be managed under the northern prescription will not meet the 50-11-40 guideline, it is anticipated that over time most areas will. Connectivity within the area to be managed under the northern prescription will be provided by a system of connectivity/diversity blocks. Through the district, additional connectivity and dispersal habitat (50-11-40) will be provided by non- matrix lands such as the Riparian Reserves, Late Seral Reserves, ACECs, RNAs, and areas like the Wild and Scenic River Corridor.
- Comment:** The adequacy of connectivity areas for spotted owl dispersal should be demonstrated.
- Response:** That can only be demonstrated through monitoring. Given other requirements of the plan, it may be impossible to isolate the effects of connectivity/diversity blocks.
- Comment:** Several activities are proposed in deferred OGEAs that appear inconsistent with the draft spotted owl recovery plan. These include density management in older second growth and large scale salvage.
- Response:** OGEAs have been dropped from the PRMP. Activities in Late-Successional Reserves must be beneficial to the spotted owl are subject to review by the Regional Ecosystem Office.
- Comment:** The potential synergistic effects of low habitat, low population and reduced dispersal, on the survival of the spotted owl should be addressed.
- Response:** A discussion of this subject has been added to Chapter 4.
- Comment:** Assess the viability of the spotted owl under the Preferred Alternative, in the short-term, at the lowest point in habitat development, and in long-term.
- Response:** An assessment of the viability of the spotted owl included in the SEIS, is discussed in Chapter 4 of the PRMP/FEIS.
- Comment:** Evaluate the effects of the plan on designated critical habitat.
- Response:** An assessment of the effects of the plan on designated critical habitat has been added to the Analysis of Effects. No actions will be implemented that will result in the destruction or adverse modification of critical habitat.
- Comment:** The discussion of the discrepancy between the spotted owl population model's projection of current population and the observed population should include problems with the model.
- Response:** Since SEIS Appendix J-3 superseded our analysis, we have not rerun the McKelvey model for analysis of the PRMP.
- Comment:** Assess the risk, that density management would negatively affect suitable spotted owl habitat.
- Response:** In the short-term, density management (or thinning) has a negative effect on spotted owl habitat. In the long-term, habitat can be improved.
- Comment:** Evaluate the level of risk to the stability of spotted owl populations under the Preferred Alternative.
- Response:** The Chapter 4 discussion has been expanded to describe risk in general terms. The SEIS evaluates risk from the (new) PRMP as it integrates with other Federal plans.



#### *Appendix V*

- Comment:** Provide information on the quality and distribution of suitable spotted owl habitat after 100 years. Identify the extent to which the development of future habitats dependent on the ability to create or speed its development through silvicultural practices.
- Response:** Information on the acreage of suitable habitat expected on BLM-administered lands after 100 years is provided in tabular form in Chapter 4. The development of quality habitat is dependent on time. The younger stands of today that hold the key to habitat recovery will be 100 to 140 years of age in 100 years. In this age range, stands are beginning to move from primarily foraging substrate to furnishing high quality foraging and nesting habitat. The role of density management is to diversify the stands structurally so that they might attain the higher quality status at approximately 120 years of age. The silvicultural practices serve as an enhancement technique that, if it is successful, will bring habitat on line faster. If it is not successful, however, stand development could be retarded and the time until habitat conditions were reached could be lengthened. Many of the answers to questions on this topic are unknown at this time, but the objective is to apply the management prescriptions over time within an adaptive management framework.
- Comment:** Discuss the capability of OGEAs, and the management proposed within them, to maintain population levels sufficient to provide internal stability within them.
- Response:** This capability, in relation to Late-Successional Reserves, has been fully addressed in the SEIS.
- Comment:** Given the lack of experience in developing and maintaining old-growth characteristics capable of supporting viable populations of spotted owls, and the lack of detailed knowledge on the components of structurally diverse forest important to spotted owls, the prediction that as much as 40 percent of the OGEAs may be subject to density management, increases the risk of catastrophic failure of the network concept. Evaluate the risk of failure of the techniques and the potential impact on the species of such a failure.
- Response:** The Chapter 4 discussion has been expanded to address this concern as it now rebates to LSRs, and it is addressed in the SEIS.
- Comment:** Specifically assess the effects of the Preferred Alternative on spotted owls in the Coast Range province.
- Response:** This is fully addressed, province-wide, in the SEIS.
- Comment:** Indicate how spotted owl dispersal will be maintained.
- Response:** Dispersal habitat for owls will be provided by the vegetation pattern and condition inherent in the management allocations and the prescriptions of the Late-successional Reserves, Riparian Reserves, Special Management Areas, Connectivity/diversity Blocks and the General Forest Management Areas.
- Comment:** Provide rationale or documentation for the statement that, isolation is not thought to be a factor under the Preferred Alternative.
- Response:** The issue of isolation of segments of the population was addressed in the Final Draft Recovery Plan for the Northern Spotted Owl and was accounted for by the size and arrangement of designated conservation areas (DCAs) and the management of the matrix between them. The PRMP adopted the reserve system identified in Alternative 9 of the SEIS and will manage the intervening SMAs, connectivity/diversity blocks and GFMA lands to facilitate adequate survival and movement of young owls.
- Comment:** Consultation with either NMFS or USF&WS may be required for spotted owls, marbled murrelets, salmon, and other proposed threatened or endangered species.

**Response:** Consultation with these two agencies is part of the planning process.

**Comment:** I believe either the ISC strategy or the Draft Recovery Plan provides a common basis for cooperation in meeting spotted owl recovery needs and achieving our agency land management goals and objectives. As you develop your final plans, I recommend that we work together to develop plans that will be compatible with the Recovery Plan developed by the Fish and Wildlife Service, and thus avoid differences or impacts between our agencies that could result in less than optimum results for both spotted owl recovery and effective management of public lands.

**Response:** This has been accomplished through the SEIS.

## **Special Areas**

**Comment:** Protection of ACECs instead or additionally as Outstanding Natural Areas (ONAs) is needed to assure truly meaningful agency protection.

**Response:** Outstanding Natural Area is a recreational designation (CFR 8352.0-2) and may not be appropriate for all ACECs. The Federal Land Policy and Management Act (FLPMA) requires protection of all the relevant and important natural features for which an ACEC is designated. ACEC designation provides adequate protection unclear existing law and policy. Secondary designations such as RNA

or ONA have been provided for some ACECs only to clarify management objectives.

**Comment:** All ACECs should be posted to prevent unintentional use, and should be closed to off-road vehicle use.

**Response:** Posting and other protective measures will be undertaken for each ACEC, commensurate with values at risk, threats from inappropriate uses, and physical and biological factors. Actions taken to prevent unintentional uses will depend on the primary values for which an ACEC was designated and will be developed during watershed planning and/or activity planning after completion of the RMP.

**Comment:** A stronger policy is needed to prevent the harvesting of "minor forest products" from special areas.

**Response:** A stronger policy has been developed for minor forest products, which are now referred to as special forest products. The discussion of them has been expanded (see Chapter 2, Special Forest Products).

**Comment:** In some cases, we do question how designations over and above normal multiple use management schemes will be of value to these areas, for example: Do special designations attract more attention to these areas that over the long-term, may have a detrimental effect? Will the cost of these areas be so exorbitant that these areas would not be beneficial to the public? Has a cost benefit analysis been completed?

**Response:** Special designation does attract more attention to an area, in some cases. The Table Rocks ACEC is an example of this. Monitoring to determine if impacts are occurring to the special values is important. If impacts are occurring, one option might be limiting the number of environmental education hikes and other types of hikers.

A cost-benefit analysis has not been completed. The cost to the public is no more than management on other lands on the district.

## Appendix V

- Comment:** Further we urge that RNA's be withdrawn from mineral entry and that if mining is in conflict with other values, an ACEC be withdrawn from mining.
- Response:** The PRMP proposes mineral withdrawal for RNA's. ACECs require a plan of operation, which must be approved. The plan addresses how impacts will be avoided.
- Comment:** Specifically, Table 2-12 states that roads in Brewer Spruce RNA are open to ORVs and that the roads in the addition to Brewer Spruce are not open to ORV use. This is, of course, inconsistent. No roads within an RNA should be open to ORV use. The same table should state no grazing and no timber harvesting at Round Top Butte ACEC/RNA. Finally, in appendix SA-2, it would be helpful under the Pipe Fork ACEC/RNA proposal to insert some comments about working with the Forest Service on their portion of the drainage, in order to get the whole area established as an RNA.
- Response:** Table 2-12 states Brewer Spruce RNA is open to ORV use on existing roads and that the Brewer Spruce addition is closed to ORV use. The Brewer Spruce RNA has a road that goes through it. The addition has no roads.
- Round Top Butte has no timberland classified as "commercial". Grazing will be handled through a specific management plan developed for the area after formal designation.
- We are working with the Forest Service on Pipe Fork RNA. A proposal is in place to designate adjacent USFS lands also.
- Comment:** Throughout the RMP the special vegetation of the Siskiyou Mountains is mentioned. Thus, this area requires more restrictive management practices than would be applied elsewhere. Management of this area must put the highest priority on preserving its unique features - and on a broad enough scale not to constrain natural evolutionary processes.
- Response:** The PRMP is proposing to designate 33 Special Areas because of the special values of the area. In addition other activities such as the Special Status Species program and designation of 211,400 acres of LSR will afford protection to these values. Also, before any management action occurs an environmental assessment is done on the proposed action.
- Comment:** We wholeheartedly support the designation of the Jenny Creek, Hoxie Creek, Tincup and Pilot Rock ACECs and the Oregon Gulch and Scotch Creek RNAs. (But why does Scotch Creek RNA have no restriction on harvest? Is it all chaparral?)
- Response:** The lands within the Scotch Creek RNA are classified as chaparral.
- Comment:** Jenny Creek is most deserving of designation; coupled with its priority watershed status, the site warrants the attention it should now get. We recommend that grazing be removed from the drainage and that acquisition of key private parcels with willing sellers be pursued.
- Response:** Grazing in the Jenny Creek ACEC will be addressed in the management plan for this area after designation. Acquisition of additional private lands along Jenny Creek is being pursued.
- Comment:** One recommendation for the final RMP regarding RNAs is that it would be beneficial to have all management concerns, i.e., fire suppression, grazing, minerals, recreation, ORV use, addressed in one section of the plan.
- Response:** Chapter 2 addresses some of these issues. In terms of specifics, they will be addressed in detail within the individual RNA management plans.
- Comment:** Rough and Ready Creek - The BLM lands around Rough and Ready Creek should be designated as an ACEC. We are opposed to airport expansion into this area because of it's unique biological and geological values. We suggest that the BLM work with the State of Oregon, U.S.

Forest Service and the local community to develop a major interpretive center in the manner of the Sonora Desert Museum or the Mono Lake Visitor Center.

Rough and Ready needs the management protection of an ACEC. It adjoins Siskiyou National Forest Botanical Interest Area and the State Park Botanical Wayside. More land is needed to preserve the diversity of the area because plants on state lands are not identical to those on BLM lands.

**Response:** About 980 acres along Rough and Ready Creek are being proposed for ACEC status in the PRMP. Interpretation will be considered in the area's management plan after designation.

**Comment:** We object to the possible roading and harvest of the Pacific Crest Trail area, the Cedars of Beaver Creek and Little Hyatt and urge retention of unentered Old Growth stands in those areas. We find it unacceptable that these ACEC proposals, found important and relevant in analysis, were rejected for ACEC status simply to increase the ASQ. Old Growth management is totally inadequate in this plan. We urge the designation of the above mentioned ACECs and any other Old Growth ACECs in the District.

**Response:** The PCT has a 50 foot no-cut buffer on each side and 1/4 mile VRM II corridor. Cedars of Beaver Creek is in a Tier 1 watershed and also an LSR. Little Hyatt has the PCT through it and is in a Tier 1 watershed (see SEIS ROD). There is 211,400 acres of LSR on the district.

**Comment:** We were disappointed that our nomination for Area of Critical Environmental Concern (ACEC) was not accepted. We note the protection provided in the Preferred Alternative (appendix page 2-70): a 50 foot no-cut buffer as part of a Special Recreation Management Area (SRMA) on each side of the Trail and also 1/4 mile Visual Resource Management II on each side of the Trail. In addition, 7 miles are in an Old Growth Emphasis Area and much of the Trail appears to be within the Cascades/Siskiyou Ecological Emphasis Area as well as the larger Quality Management Area (QMA) (Vol. I, page 2-58). However, we are concerned that these provisions may not be sufficient to protect the values of the Pacific Crest Trail, and so urge reconsideration of ACEC status for the length of the Trail.

**Response:** When the Pacific Crest Trail went through the ACEC nomination process, BLM management felt ACEC designation would not provide addition management constraints beyond the 50-foot no-cut buffer and 1/4-mile VRM II zone on each side of the trail. This is one of the rationale for not designating (BLM 1613- E: Rationale for Designating or Not Designating - The same management prescription would occur in the absence of designation). In the PRMP, the Cascade/ Siskiyou Ecological Emphasis Area has been enlarged to include that portion of the PCT that runs south from Highway 66. This provides inclusion of the BLM portion of the PCT within a special emphasis area from I-5 to Highway 66.

**Comment:** In a more general nature the issue of recreation use is not addressed adequately in the plan. There is real potential here for future conflicts having to do with public access, hunting, wildlife enhancement projects, etc. The idea is not necessarily to prohibit these things, but to give some kind of guidance in order to prevent unnecessary damage to the areas and their potential for baseline monitoring. Also the issue of adjacent land management to RNAs and its effect on what goes on inside the RNAs is of importance. I would be glad to provide any help I could in crafting such language for the final plan, if you would like.

**Response:** Specific management plans for RNAs will address these issues. However, these plans should have input and review by the Pacific Northwest RNA scientist. We welcome your help on this.

**Comment:** There is still room for improvement for proposed management of the RNAs. For instance, we did not see any reference made to excluding grazing from grassland based RNAs, such as Round Top Butte. Also recreation and timber harvest should be addressed at Round Top Butte as well as at other RNAs (perhaps noting that salvage is not permitted unless it meets the goals of the RNA should be included as well).

## Appendix V

Response: These activities will all be addressed in the individual management plans for each RNA.

Comment: One area, Poverty Flats, near Butte Falls, needs not only designation but an active change in management. Grazing on the public lands and adjacent private land continues to impact the rare plants and natural community present. Acquisition of the adjacent property should be a priority to the District.

Response: We have just finished fencing Poverty Flat. The adjacent private land is under a Conservation Agreement between the land owner and the Nature Conservancy.

Comment: The Nature Conservancy would like to nominate Siskiyou Pass as a candidate for Area of Critical Environmental Concern (ACEC) designation.

One potential designation that has not been included in the RMP involves Bureau land at Siskiyou Pass and the exchange lands that the [Nature] Conservancy intends to transfer to BLM in the future. The site meets the ACEC criteria regarding relevance and importance and would clearly benefit by designation. Our organization hopes that the District can consider the ACEC nomination within the content of the RMP as we expect that the exchange will be completed before the RMP is finalized.

Siskiyou Pass area contains oak-juniper plant communities that should be recognized and preserved within the Oregon Natural Heritage Plan (ONHP).

Response: The 220 acres in the Siskiyou Pass, which were acquired in a land exchange, have been included in the proposed Pilot Rock ACEC in the PRMP. When The Nature Conservancy was inventorying our district for potential RNAs for the QNHP the Siskiyou Pass was not identified for an oak-juniper RNA. This area has been heavily disturbed in the past and would not readily qualify for RNA Status.

Comment: We urge buffering around the small Tincup ACEC to protect its special values from edge effect and buffering of any other areas as needed.

Response: Edge effect was considered in the ID team process. According to current literature, it has probably already occurred at the Tin cup parcel. Buffering at this time would be too late and have little effect. Two RNAs (Grayback Glade and Silver Creek) are proposed for buffering in the PRMP.

Comment: Paradise tributary is one of only three tributaries in the Deer Creek drainage with temperatures adhering to water quality standards set by the DEQ. Adoption of Paradise ACEC is necessary to protect the remaining integrity of this watershed.

Response: ACEC designation is based on whether or not a potential ACEC requires special management attention in the selected plan alternative (BLM Manual 1613.C.23). In the PRMP, the proposed Paradise ACEC is in an LSR allocation with Paradise Creek receiving 300-foot buffers on each side. The overall area will be receiving the type of management that makes designation unnecessary, i.e., management would not be any different with designation.

Comment: Spalding supports the designation of ACECs, RNAs, and BEAs found in the PA. However, we do have some concerns that need to be addressed in the final plan.

- Are we putting just another layer of red tape around something any responsible land manager would protect doing their normal job?
- What is the benefit of listing these areas? Would we be better off not giving them special recognition and protecting them by not drawing attention to them? If we draw too much attention to these areas, we run the risk of getting them overused. This has been happening on Table Rocks. Why would any of these areas be any different? Maybe some should be protected and



some not protected. A very careful analysis needs to be done before making a decision for the final plan.

- Will the listings, and probable increase of use, make additional protection measures necessary? Fences around special areas so people don't trample the plants you are protecting might be one example.
- Have the areas been set aside in 40, 80, and 160 acre blocks or is just what needs to be protected being set aside? Are there buffers around these areas that will protect them adequately when management activities are nearby? We don't want to see the situation where additional protection measures are added under the theory that if a little is good then a lot is better.

We support the BLM's efforts to protect these special areas as long as timber can be removed when fire, insects, or wind cause damage to the stands.

**Response:** A careful analysis was done on all nominated special areas. The benefit of listing RNAs is that these are areas we try to maintain in as near natural conditions as possible to be used as a control area to compare against the lands we are actively managing. They are areas where universities and scientists are encouraged to do non-destructive research. (Brewer's Spruce RNA has had forestry paper published on the research done in the area.) These areas would not be protected without designation, although it is recognized that designation may draw some extra attention to them, which could result in overuse. You are right; Table Rocks receives lots of use. But this is partly due to its close proximity to Medford. The areas were not set aside in general acreage blocks but rather what was considered to be the necessary size to accomplish the goals of the designation. Buffers were considered and only two were felt to need them, Grayback Glades and Silver Creek RNAs.

**Comment:** NO LOGGING in the Holten Old Growth in Kerby, nor in the entire Deer Creek drainage (Selma, already the water is too warm for healthy fisheries); nor in Alien, Sailor and Scotch Gulches; nor on Hope Mountain. The private lands on Hope Mountain have been logged 4 times in the 1 years I have lived at its base. The stream buffers, inadequate to begin with, have been violated; there is nothing left with a DBH of more than 6-8". BLM planning must take this into consideration in evaluating what the cumulating impacts on the region add up to. Clearly, we need new laws restricting human abuse of private lands, too. Make the BLM lands here into ACECs-don't manage them as if they were O&C lands!

**Response:** ACEC designation does not automatically preclude logging from an area. ACEC designation is to highlight areas where special management is needed to protect and to prevent irreparable damage to important historical, cultural and scenic values, fish and wildlife resources or other natural systems and processes; or to protect human life and safety from natural hazards.

**Comment:** Are these (special areas) set asides allowed under the dominant use O&C act? It is our understanding that these acres will stay in the multiple use land base. How will blow-down and bugs or rampant disease be handled? Will a desired future condition be planned and active management occur to ensure we achieve that goal?

**Response:** Special areas are allowed under the O&C Act. RNAs (Research Natural Areas) will not be considered as part of the multiple-use land base as they are considered "control areas" for comparison with multiple-use lands. Active management will occur in special areas with the development of management plans. These management plans will consider desired future conditions, treatment strategies to achieve them, and contingencies for wildfire, disease and blowdown, on an area-by-area basis.

The lands around Rough and Ready Creek should be designated as an ACEC. Suggest the agencies involved and local community work together to develop a major interpretive center.

Response: The PRMP proposes designation of 980 acres of the Rough and Ready nomination as an ACEC. Interpretation of the area will be addressed in the management plan for the area after designation.

Comment: The proposed French Flat ACEC is a blatant and unwarranted attempt to prevent producing gold from claims. This area should not be included in ACEC designation.

Response: The proposed French Flat ACEC is based on the occurrence of the rare *Lomatium cookii* which is a native to the Illinois and Rogue Valleys. ACEC designation does not prevent mining or the patenting process. It does require a plan of operation for mining in designated ACEC. The PRMP proposes to designate this as an ACEC and work with mining claimant.

Comment: French Flat should be designated as an ACEC for its native rare plants and open valley woodlands.

Response: The proposed French Flat ACEC is recommended for designation in the PRMP.

Comment: Flounce Rock should receive ACEC status to protect the habitat of the Baker cypress.

Response: The PRMP designates 10 acres where the Baker cypress occur as an ACEC. The remaining area will be designated as an EEA. Management of the area will be essentially the same as if it were designated an ACEC (see Table 2-12) except special emphasis will be placed on local school groups using the area to learn about forestry and history (the old military road).

Comment: Poverty Flat has a south aspect of Douglas-fir growing out of the lava boulders from the collapsed rimrocks, shading ancient colonies of lichens and mosses. The Bat Cave with big-eared bats and albino white salamanders are just outside Poverty Flats. There are remnants of a petrified forest in the bedrock of McNeil Creek.

Response: The proposed Poverty Flat ACEC includes the bat caves.

Comment: The Quality Management Area (QMA) concept is poorly defined and leaves one with the impression that BLM has not managed its in a "high quality" fashion. SOTIA supports a "good neighbor policy," but not retaining the name QMA.

Response: Quality Management Area concepts is an unofficial designation within the OR/WA BLM. The emphasis is working with neighboring landowners to provide landscape type management.

Comment: We support the concept of Quality Management Area, but feel that it needs more documentation to be viable.

Response: Boundaries and criteria will be developed in a management plan that the resource area is currently working on.

Comment: The questions posed below are issues that we believe need to be reviewed before the final RMP:

Is the number of acres designated for the RNA or SMA really necessary for protecting these special resources? For example, the 10 RNAs total 8,242 acres. Has BLM just protected these areas adequately, or did BLM exercise the conservatism apparent throughout the plan by designating more land than was really necessary?

How will forest health issues be handled in these areas—salvage, thinning and other non-intensive management activities?

What about fire suppression in these areas, meaning, does BLM intend to fight fire in these areas, or let it burn?

How much will the public and our communities benefit from having these areas designated?

Are these set asides consistent with the O&C Act?

BLM has already proposed stringent protection for riparian areas and old growth (in it RMAs and OGEAs), why should these layers be added, when these values are already protected on tens of thousands of acres?

Will the ACEC designation enhance or restrict any future management decisions?

What is the additional cost of designating these ACECs and managing them as such? Would normal management do the same thing at a much reduced cost? If the long term desired future condition of the forest is a vibrant, healthy ecosystem, then way is the BLM not managing to reduce disease by harvesting in a selective manner?

Environmentally sensitive logging may be the best way to maintain these areas over time.

In regard to Jenny Creek, Boise Cascade; Croman Corp, Weyerhaeuser Co., have assisted in restoring this area under the AMQ concept. Is it necessary to identify Jenny Creek as an ACEC when it is being treated as one without designation?

Response: RNAs (Research Natural Areas) are part of national system to set aside native plant communities to use as a baseline or control site where human manipulation is at a minimum. These areas are used for research. Forest health issues will be addressed in management plans. Fire suppression in these areas will be dependent on rural interface but prescribed fire will be one of the management tools used to help maintain these plant communities. These set asides are consistent with the O&C Act. These areas are the best example of native plant communities found in southwestern Oregon. They will help determine how to manage other lands. These plant communities are not represented in riparian areas.

ACEC designation requires a closer look at activities that occur in the area to ensure that it does not impact the primary values of the area. Management decisions will be based on the most current information available, Bureau directions and existing laws.

Jenny Creek is being treated as though it were an ACEC because it is in the status of a proposed ACEC. Bureau policy is to treat nominated areas as though they are an ACEC until a decision is made whether to designate or not so important values will not be impaired.

Comment: Attachment #1 displays an additional proposal only recently generated. The half mile of trail would connect the end of the existing London Peak Road with a scenic vista overlooking Wolf Creek. The immediate northerly ridgeline as seen from the viewpoint is the Rogue/Umpqua Divide. A barrier free trail is the ultimate goal. Its interpretive and scenic assets are magnified exponentially by the sites proximity to I-5, just 20 minutes away, making it the most accessible old growth in Oregon! KMA proposes the site for ACEC designation.

Response: The Glendale RA will be preparing an environmental analysis for the portion of the trail that would be on BLM. The President's forest plan evaluated significant stands of old growth in the range of the northern spotted owl and those sites which had the ecological characteristics of old growth were designated LSR. Other stands on the district would not qualify for ACEC relevance and importance on the basis of old growth alone. Although, this area is part of the matrix land it is VRM Class II and no harvest is planned.

## Appendix V

- Comment:** The Siskiyou-Cascade Natural Area fits the concept of an ACEC. We recommend that this entire area be managed as a single large ACEC in the preferred alternative. The area is a migratory path for plants from the Great Basin to the Siskiyou. Plants and animals have crossed the Cascades through this important corridor.
- Response:** We agree, the Siskiyou-Cascade Natural Area fits the concept of an ACEC and it is an important migratory pathway for plants and animals from the Great Basin to the Siskiyou. However, we feel a CRMP, working with the private landowners and other interested parties (including ODFW and Soda Mountain Wilderness Council) will give us the best possible management for the area. Such things as re-habilitation with native species, acquisition of private lands, grazing, etc. will be considered.
- Comment:** Please include the Dekubetede Area of Critical Environmental concern in the Preferred Alternative of the final plan. This 5,240 acre area has a wide range of microclimates that support unique and diverse plant communities and many wildlife species. I implore you to stop all road building and clearcutting and totally discontinue use of herbicide spray.
- Response:** ACEC designation would not provide a different type of management. BLM manual 1613.E (Rationale for Designating or Not Designating) states if the same management would occur whether designated or not don't designate. ACEC designation does not preclude activities from occurring in an area unless they are impacting the primary values of the ACEC. Special status plant species and plant communities would be managed the same whether designated or not designated.
- Comment:** The Takilma area BLM forest holds one of the last stands of ancient forest which is adjacent to valley bottom. This area should be designated an ACEC. Please include all neighboring serpentine areas. These areas are botanically important, besides being difficult areas to reforest after logging.
- Response:** The forest inventory records do not show any ancient forest by Takilma. The President's Forest Plan evaluated significant stands of old growth in the range of the northern spotted owl and those sites which had the ecological characteristics of old growth were designated LSRs.
- Comment:** Another area of concern to Takilma citizens and contiguous to the Takilma Forest is the mostly serpentinized Waldo Area of upper Scotch, Allen, Sailor and Fry Gulches. This area has many unusual plant species and communities and is a famous old botanical collecting area. SREP nominates these two areas as an ACEC with the following outstanding characteristics:
- Low elevation mixed evergreen old growth and mature forests adjoining interior valley habitat.
  - Serpentine component with rare plants, unusual plant communities including small forested met-volcanic pluton island surrounded by serpentine
  - Historical and archeological values including old mining towns of Allens Gulch, the old cemetery, extensive mining ditch systems and history of early of early botanical use
  - High potential for recreational area with foot, horse trail system could utilize mining ditches for trails.
- Response:** The district recognizes the importance of the Waldo area as an historic botanical collecting site and type locality. This nomination needs to be accompanied with a map and a letter describing the rare plants and unusual plant communities.
- Comment:** It seems important to save one or more parcels of old growth for educational purposes, accessibly close to each school district and larger towns. Often these educational set-asides could be integrated and/or complemented with other special areas such as ACECs.

- Response: There are either RNAs, ACECs, EEAs or LSRs near all the larger towns that contain old growth which could be used for educational purposes. Existing ACECs (Table Rock, Eight Dollar Mountain) are currently used for education purposes.
- Comment: I am particularly concerned about the Williams watershed as it is my home. It is not designated an area of ACEC.
- Response: The Williams watershed contains 1617 acres in RNA status which provides management to maintain the areas for a baseline. The majority of the watershed is in an LSR. These designations provide less other management options than an ACEC.
- Comment: Protect all the candidates for the Area of Critical Environmental Concern (ACEC). Many of the areas that were nominated were not accepted in the final draft. Specifically, we urge the designation of the 11 new candidate ACECs that are not designated under the Preferred Alternative. How are these areas going to be used/managed?
- Response: Many of the areas nominated for ACECs status will be receiving more protection under the different designation in the PRMP than they would have under ACEC designation. Appendix 2-SA-2. Management of Candidate ACECs not Selected in the Preferred Alternative list management of these areas in the PRMP.
- Comment: Concerning the Potential ACEC known as the Enchanted Forest we feel the area should be designated an ACEC in the final RMP for the following reasons:
- Meets the criteria for Wildlife Value because wildlife such as bobcat, black bear and blacktail deer as well as pileate woodpecker and other birds need the thermal cover and moisture provided by the Enchanted Forest.
  - Meets the criteria of Scenic Value because of the hundreds of big leaf maple in addition to old growth forest. Meets the criteria of Botanical Value because of two special status plants, including the only known North Applegate Valley population of *Mimulus douglasii*.
- A successful nest site for the spotted owl. It was found relevant for natural systems or processes for botany as it had potential for a new species of *Lithophragma*. Importance was based on the same reasons. It was not selected for designation as the area does not contain any special values that cannot be managed under the existing management direction. Management would be no different for these species with or without designation. Both of these resources can be protected under the 6840 Manual guidelines (Management of Special Status Species). The two plant species listed, *Mimulus douglasii* and *Lithophragma campanulatum*, (both exist in several other locations on the district) are only Bureau Tracking which carries no special management. This is just a tracking of occurrences. There are other riparian areas in the vicinity which have similar stands of big leaf maple. This area is in the AMA and a portion occurs in the RIA. Management for these designations would be applicable for this area.
- Comment: The summary comparison of all alternatives shows proposed ACECs ranging from zero to 24. We feel the District should determine those areas which are truly significant and then hold firm. The same number of ACECs should be proposed for all alternatives.
- Response: There was different criteria for designation of ACECs in each alternative. Please refer to Proposed State Director Guidance, May 1988, Guidance for Formulation of Alternatives 1-1.

## Cultural Resources

- Comment: The cultural resources discussion does not accurately address governmental bodies of Federally recognized Indian tribes.



## Appendix V

- Response:** The text has been revised to identify such bodies by the appropriate names or collectively refer to them as "Federally recognized Indian Tribes" or as "Indian Nations."
- Comment:** The cultural resources section of the document should include interaction and consultation with appropriate tribal governments regarding cultural/archeological issues.
- Response:** The Chapter 2 discussion of Cultural Resources has been expanded to address these interactions. The provision of the draft RMP to the tribal governments is regarded as the first step in the consultation process. Further interaction and consultation regarding site-specific actions of tribal interest can be initiated either by the tribe or by the BLM as tribal concerns are identified. BLM has suggested (and is in the process of consulting about with each of the tribal governments) the development of Memorandums of Understanding that will encourage more interaction and consultation between the tribal governments and the BLM.
- Comment:** The Allen Gulch BLM area should be considered as a cultural resource site or area due to its history and the ruins of the old Allentown community.
- Response:** This is a site-specific concern, best addressed in and activity plan. Cultural resources such as these will be protected in accordance with current laws and regulations.
- Comment:** What type of management is planned for the Applegate Trail that crosses BLM land in several locations?
- Response:** This is a site-specific concern, best addressed in and activity plan. Cultural resources such as these will be protected in accordance with current laws and regulations.

## Visual Resources

- Comment:** Describe existing visual conditions along major highways, identify those segments appropriate for visual management, and direct management plans to achieve expected future conditions.
- Response:** BLM-administered lands have been inventoried, evaluated and assigned inventory classes based on their relative worth from a VRM point of view. Chapter 3 describes the results of the inventory process. The Alternatives recommend various classes of visual resource management (VRM) for BLM-administered lands including lands along major highways. Each VRM class has objectives (See Chapter 2 for the prescriptions) and these objectives are used to identify management prescriptions that would maintain, enhance, or preserve scenic values.
- Comment:** Long-term visual management objectives should consider the use of silvicultural practices to accomplish the VRM objectives.
- Response:** Such practices will be used in VRM Class II and III areas where consistent, with land use allocations protective of other resources (see PRMP Management Actions/Direction).
- Comment:** Work with adjacent landowners and others to maintain visual continuity.
- Response:** BLM has authority or responsibility for visual resource management only on BLM-administered lands. We will work with adjacent landowners that are interested, to coordinate visual resource managements primarily during watershed analysis
- Comment:** We are concerned that visuals will become a major obstacle to good on-the-ground: management (timber production). We suggest that the BLM consider managing the land as a mosaic so there are no hard edges to cutting units, and thus soften the visual effect. This can be done along the Interstate 5 corridor and other visually sensitive places.

When one talks about the "out-of-sight" places west of Glendale or up near Butte Falls, then high intensity forest management can occur without visuals playing such an important role.

- Response:** The specific areas you address are in the northern general forest management area (NGFMA) which will be managed under VRM Class IV guidelines. Allocations to VRM Class II management are limited to the Galesville SRMA, Lost Creek Lake SRMA, and to one-mile wide foreground zones along each side of Interstate 5, Highway 62 (USFS boundary to Shady Cove), and the Butte Falls-Prospect Highway. Most BLM-administered matrix lands within highly sensitive major highway corridors are still allocated to VRM Class III or IV management under the proposed plan. Silvicultural prescriptions will be in accordance with Chapter 2, VRM Class objectives. BLM-administered land within the SGFMA will be managed for VRM Class III objectives.
- Comment:** Cobleigh road residents appeal current VRM inventory and Draft RMP -PA VRM Class IV management allocation by petition.
- Response:** The current VRM inventory identifies the Butte Falls rating unit as class "A" for scenic quality with a "high" public sensitivity rating. The proposed plan includes a recommendation to designate the Butte Falls-Prospect Highway as a back country byway and manage the route as VRM Class II.
- Comment:** Were VRM inventories completed for all travel routes? Was any information available that indicated the extent that tourists wander from the traditional tourist areas into the less well publicized countryside?
- Response:** VRM inventories were completed for all travel routes having an approximate average daily traffic count of more than 20 vehicles, as determined and mapped by the District. No information was available regarding the extent recreationists travel into the less well publicized countryside.
- Comment:** Visual resource management under the PA would violate the Federal Land Policy and Management Act of 1976, 43 U.S.C. 1701 et. seq. Section 102 (a)(8) states that "... public lands be managed in a manner that will protect the quality of the ...scenic ...values...". It would also violate the National Environmental Policy Act of 1969, 43 U.S.C. 4321 et. seq. Section 101(b) requires measures be taken to "... assure for all Americans... aesthetically pleasing surrounds... ". Clearly, managing VRM Class II inventoried lands as Class IV would neither protect their scenic values, nor would it assure aesthetically pleasing surroundings for all Americans.
- Response:** BLM-administered lands are managed for a variety of resource uses and benefits, not just visual resources. In order to prepare a balanced resource management plan (RMP) for the planning area, some resource trade-offs are necessary for the benefit of other resource programs and the support of local economies.
- Comment:** What was the justification for allocating 186,000 acres of VRM inventoried Class II lands to VRM management Class III and IV in the Draft RMP-PA?
- Response:** It is felt that VRM Class II management objectives will in many situations unduly limit management options for some areas. Also, it should be noted that overall management guidelines for riparian reserves, late successional reserves, and the southern GFMA will either mimic or approach VRM Class II management objectives.
- Comment:** VRM guidelines may constrain good on-the-ground forest management. Due to BLM alternate section ownership, VRM management classifications above Class IV are not achievable. BLM should not allocate VRM management objectives along roadways that are jointly owned by private land owners.
- Response:** VRM management objectives apply only to BLM-administered land. However, the VRM inventories have been adopted by Jackson and Josephine counties for input into their County Comprehensive Land Use Plans, Goal 5.

## Appendix V

- Comment: Failure of the Draft RMP to discuss the impacts of the "...short and long-term adverse effects on visual resources..." that would result under the PA constitutes a violation of the Council of Environmental Qualities (CEQ) regulations.
- Response: This was included in Chapter 4, Visual Resource Management, but has been updated for clarity.
- Comment: The Grayback Mountain area was omitted from the VRM inventory.
- Response: The referenced Williams Valley viewshed lands are under the jurisdiction of the U.S. Forest Service and are outside the Districts' planning area.
- Comment: The unresolved question that is unresolved until further information is available is: "It is in the western Oregon counties long-term best economic interest for the BLM timber lands to be managed in a manner that will create long-term adverse effects on visual resources."
- Response: The Proposed plan provides a balance between protection of highly valued scenic resources and timber management.
- Comment: The VRM data, allocations, and impact are inadequately displayed. Proposed VRM allocations for the PRMP and other alternatives is shown in Table S -I and described in Chapter 2. Changes from the 1988 inventory are shown in Table 4-VRM-I (Draft).

## Wild and Scenic Rivers

- Comment: State whether BLM land management actions that could impact on designated State scenic waterways will be coordinated with the State.
- Response: This coordination will occur in accordance with the Memorandum of Understanding for River Management between BLM, the Forest Service, and the Oregon Parks and Recreation Department.
- Comment: Clarify how technical procedures were used by BLM to determine wild and scenic river suitability.
- Response: Although a number of explicit technical criteria were used to determine which rivers would be found suitable under Alternatives A, B, C, D, and E, the suitability findings in the PRMP were based on a more subjective weighing of these criteria plus public comment on the various rivers.
- Comment: Consider the following additional criteria in suitability determinations.
- a. Aggregate's values of a given stream.
  - b. Importance of aggregated values on both a statewide and SCORP regional level.
  - c. Importance of smaller "less stellar" streams to program.
  - d. Non-local as well as local support for a given stream.
- Response: These factors were considered in the PRMP.
- Comment: How is it possible, to recommend a given eligible River segment for National Wild and Scenic River status in one Alternative, and not in another?

- Response: To show a range of alternatives the variation is based on the relative importance attached to economic tradeoffs, quality of the River segments, and manageability of outstandingly remarkable values by BLM. The purpose of alternatives is to consider varying management direction and resource allocations.
- Comment: Wild and Scenic River suitability is not based on a "Top Four" recognition.
- Response: The "top four" assessment was used to structure Alternatives B, C and D, but was not directly used in the suitability findings process for the (Draft RMP/EIS) Preferred Alternative or the PRMP.
- Comment: The cursory suitability studies in the RMPs do not fulfill the BLM policy requirement. It is especially important to evaluate degradation to outstandingly remarkable values (ORVs) should a River not be given Wild and Scenic status.
- Response: The Wild and Scenic River Assessment reports in Appendix of the Draft RMP/EIS were prepared in accordance with BLM policy. Probable degradation of ORVs, should a River not be given wild and scenic status, is addressed in the section of each report titled Effects on Outstandingly Remarkable Values.
- Comment: Another management option does not preclude wild and scenic status. RMPs are not permanent and will no doubt change. BLM should protect those rivers deserving of such status.
- Response: The suitability findings proposed considered all those aspects of the question.
- Comment: The alternative management options for "not suitable" rivers may not give them protection comparable to Wild and Scenic status.
- Response: The "not suitable" rivers were all found to be eligible for recreational classification only. Proposed riparian reserve widths on these segments range from to feet on each side of the stream, subject to some modification after watershed analysis. These widths and other management direction outside the riparian reserves would provide comparable or better protection than that envisioned by the Wild and Scenic Rivers Act for the portions of these River segments crossing BLM-administered lands.
- Comment: All values on eligible rivers should be maintained at their current level until Congress acts.
- Response: Neither the Wild and Scenic Rivers Act nor any related policy suggests that an agency's negative suitability determinations on eligible rivers will be referred to Congress for action. The standard protocol is that the agency's negative determination resolves the issue.
- Comment: How long will interim management occur on eligible rivers not studied in the RMP.
- Response: Since BLM has no plan to study these rivers and neither does any other agency, interim management may last a long time.
- Comment: Interim guidelines for eligible wild and scenic rivers result in de facto designation and management of those rivers in violation of the Wild and Scenic Rivers Act and FLPMA. Further, the interim guidelines exceed the Department of Interior's own regulations by excluding timber management activities along these rivers.
- Response: The de facto designation is only for the period until suitability is determined or, if found suitable, a river's status is settled by legislation. This is consistent with FLPMA and in accordance with the Wild and Scenic Rivers Act. Timber management activities are excluded within the full 1/2-mile-wide corridor for protection of such rivers only if they are eligible for wild classification. Suitability findings are made for all rivers eligible for wild classification.

## *Appendix V*

- Comment:** The simple fact that a River has anadromous fish, scenic or recreational qualities does not qualify it as eligible for further study under the Wild and Scenic Rivers Act.
- Response:** True. The values must be found to be "outstandingly remarkable" under the terms of the Act.
- Comment:** Additional streams, other than those listed, should be studied for inclusion in the Wild and Scenic Rivers System.
- Response:** All streams on the Medford District were considered for eligibility and only those listed met the criteria.
- Comment:** Designation of wild and scenic rivers should be up to Congress, not the local agency.
- Response:** BLM only makes recommendations to Congress. Only Congress or the Secretary of the Interior upon recommendation by the Governor can designate rivers as part of the National Wild and Scenic River System.
- Comment:** The time frames for interim management protection are not given in the RMP.
- Response:** Time frames for interim management protection are explained in Chapter 2.
- Comment:** Placing rivers in the Wild and Scenic Rivers System is a fifth amendment taking of miner property rights and will preclude mining activity.
- Response:** Congress included provisions for valid existing rights when writing the Wild and Scenic River Act. Mineral potential was considered when assessing suitability for all streams and miner's management is included in the Management Guidelines and Standards for National Wild and Scenic Rivers for Oregon and Washington.
- Comment:** The RMP/EIS does not contain the information necessary to address the management of the Rogue Wild and Scenic River.
- Response:** The management of the Rogue Wild and Scenic River is not a subject of this PRMP as stated in Chapter 1.
- Comment:** Suitability determinations appear to be arbitrary since streams possessing similar values are recommended for different designations.
- Response:** Congress recognized the fact that suitability determinations are a subjective process. Because of this, a team approach is used in determining suitability. To be eligible, a stream need only possess one outstandingly remarkable value to be found suitable. Wild and Scenic River designation must outweigh other resource uses, which is part of the balancing process performed by BLM decision makers.
- Comment:** Wild and Scenic Rivers recommendations should be based on specific criteria found in the Wild and Scenic Rivers Act.
- Response:** The Wild and Scenic Rivers Act includes the requirements for studying and designating Wild and Scenic Rivers, however, the specifics of how to complete the process are not included in the Act. The Department of Agriculture and the Department of the Interior issued joint guidelines for satisfying the requirements of the Act and these were followed throughout this process.
- Comment:** Relationship of the RMP to BLM policies, programs, and other plans should include the fact that the required EA or EIS of the designated Rogue Wild and Scenic River has not been made. That studies are ongoing.
- Response:** This is included in Chapter 2, Wild and Scenic rivers.



## **Recreation**

- Comment:** Coordinate with State and local government on actions that may influence the Regional Strategies and Community Initiatives programs. Develop a multiple agency recreation planning program to promote recreational development and tourism.
- Response:** Such coordination is provided for in the plan and discussed where relevant, but specific multiple agency planning is an implementation planning process function, not a part of the PRMP.
- Comment:** Develop trail plans.
- Response:** Trail plan development is a part of activity planning which would follow RMP completion.
- Comment:** Include provisions for designating areas to meet off-road vehicle demand.
- Response:** It is BLM policy that off-highway vehicle use is acceptable wherever it is compatible with established resource management objectives. BLM-administered lands remain open to such use unless specifically closed or limited. After completion of the RMP, the District will develop an OHV implementation plan with more specific management provisions.
- Comment:** Strengthen standards and guidelines for OHV use.
- Response:** Those guidelines are contained in the Bureau's regulations (43 CFR 8340). Revision of those regulations is beyond the scope of the PRMP.
- Comment:** Use of the term "off-road vehicle, rather than "off-highway vehicle," implies that vehicles leaving roads or trails is OK, which is not so.
- Response:** The term has been revised to off-highway vehicle.
- Comment:** Incorporate the ROS rating system into the final plan.
- Response:** Due to the fragmented land ownership pattern and the density of the existing road system on BLM-administered lands in the planning area, ROS is considered largely irrelevant to BLM decisions there. ROS concepts will be used at the watershed analysis and/or activity planning stage for specific land areas where appropriate.
- Comment:** Trails should be protected with no-cut zones and VRM Class II buffers.
- Response:** Trails of national significance on BLM-administered lands will be protected with no-cut zones and quarter-mile VRM Class II corridors. Other trails will not be protected so the lands may be developed to benefit other resource programs under multiple-use management.
- Comment:** All candidate recreations sites should be protected.
- Response:** All identified high value recreation sites are removed from intensive timber management. Inventoried recreation sites will be reviewed during other resource development project activity planning/EA reviews.
- Comment:** Little attention is given to the recreation and tourism needs of the surrounding Butte Falls area. Almost no consideration has been given to establishing scenic roads, streams, or recreation sites.
- Response:** The Proposed plan recommends development of six potential recreation sites, cooperation in the possible development of the Medco Railroad right-of-way trail, acquisition of the Medco pond lands, and the designation of the Butte Falls- Prospect Highway as a proposed back country

byway (BCBW) as supporting actions to the Butte Falls rural community tourism initiatives and comprehensive land use management plan.

Comment: Do the potential recreation sites include the Rogue National Wild and Scenic River sites?

Response: No. Management of the Rogue National Wild and Scenic River is being addressed in a separate joint recreation area management plan (RAMP).

Comment: Your PA states that Lost Creek Reservoir will become a special recreation management area (SRMA). When will this happen? What actions need to take place or will this designation be complete when this plan is final? When will the stated recreation area management plan be prepared? May the public participate in the preparation of this plan?

The Lost Creek Reservoir SRMA will be designated upon implementation/approval of this plan. The preparation of SRMA recreation area management plans (RAMPs) are a high priority. Public participation is required in the preparation of all BLM management plans.

Comment: I propose the Allen gulch BLM area in its entirety be considered a recreation site. This area including St. Patrick's Cemetery receives a lot of visitors during fair weather due to its historical/recreational interests (including Sailors Gulch).

Response: These lands have not been inventoried by the Grants Pass Resource Area as high value recreation resources. New recreation resource inventories are outside the scope of the PRMP.

Comment: We urge the King Mountain Advocates and the BLM to continue looking into possibilities for a Rogue National Wild and Scenic River Connector Trail, but in the meantime, there appears to be enough significance in the London Peak- Malone Peak trails to give them "stand-alone" value and consideration in the PRMP.

Response: The Proposed Action has been changed to include and support the State's proposed Rogue National Wild and Scenic River Connector Trail as outlined in the State's 2010 Plan for Region 9. The State Trail Committee has allocated \$7,000 to the District for development of the Malone Peak Handicapped Accessible Trail/Viewpoint.

Comment: We recommend development of a Buck Prairie Trail. We suggest the inventory of abandoned logging roads, spurs for the development of mountain bike, motorcycle, and equestrian trails. The provision of such routes should reduce the conflicts between hikers and motorized vehicles.

Response: Development of a Buck Prairie Trail will be considered in the future. A District Transportation Management Plan will be prepared that will evaluate opportunities to designate old roads, spurs, and jeep trails for horseback riding, mountain biking, motorcycles, ATVs and other OHV uses.

Comment: The OHV designation of the RMP-PA is too restrictive and unacceptable.

Response: OHV allocations of the Proposed Action have been changed from all lands limited to existing roads to all lands open, unless limited or closed. In addition, three OHV management areas (Timber Mountain-Johns Peak, Ferris Gulch, and Quartz Creek) have been designated. Recreation area management plans (RAMPs) will be prepared and presented to the State ATV Allocation Committee for support/funding of management guidance, facility development, education programs, law enforcement, and resource area rehabilitation (see Table 2-REC -15 for OHV designations by Alternative).

Snowmobiles and ATVs may use all BLM-administered lands designated open that have a minimum of 12 inches snow cover to protect the soil and vegetation.

**Comment:** In the Environmental Consequences section you estimated 533,000 visitor-use days by the year 2000. You also stated that the PA will meet 90% of this demand. Please explain how this demand will be met when there is no significant developments being planned. Is this all dispersed recreation? Table 4-REC-I shows that demand for bicycling, dayhiking/backpacking, horseback riding, camping, picnicking, nature study, and wildlife viewing demand will not be met.

**Response:** The Proposed Action identified 31 new recreation sites, 16 new trails providing 160 miles, and 3 OHV areas would be developed if funding was possible (see Table S-I). This level of recreation facility development would be significant but would still only meet 90% of the projected SCORP demand. The probability that this level of development would be accomplished in the next decade is very unlikely, therefore the environmental effect is that demand would not be met (see Table 4-REC-I).

## **Timber - Management Direction/Practices**

**Comment:** Timber supply does not appear to be an important part of the Alternative formulation.

**Response:** Timber supply was a consideration, both in the RMP/EIS and the SEIS. Since timber supply concerns, paralleled concerns regarding socioeconomic conditions which had a higher visibility, its role in the formulation of the Alternatives was less visible.

**Comment:** Explain the rationale for minimum harvest ages.

**Response:** Minimum harvest age refers to the youngest age at which a forest stand may be scheduled for regeneration harvest. In previous BLM plans, minimum harvest ages were set well below CMAI in order to provide flexibility in balancing age class distributions, although over time harvest age rose to CMAI. These concepts for setting harvest rotations have become of lesser relevancy because of changes in objectives and because of scientific advances, including the realization that CMAI can occur at a wide variety of ages depending on thinning regimes and other features of the silvicultural system.

For this plan, the rationale for setting minimum harvest age differed between the alternatives. For Alternatives A, B, D, and E, minimum harvest age was set at 60 years based on the economics of regeneration harvesting of younger aged stands. For Alternative C, minimum harvest ages of 150 years were designed to achieve desired habitats and ecological objectives. For the PA, minimum harvest ages of 100 years and 120 years were set for the northern and southern GFMA based on attainment of wood quality objectives, logging economics, habitat conditions, landscape seral composition, and retention of site productivity.

**Comment:** The RMP calls for harvest of one-quarter of the stands 100 to 200 years old during the next decade, a rate not sustainable.

**Response:** The PRMP assures sustainability through the use of the TRIM PLUS model. Selection of stands for harvesting will be based on the results of watershed analysis.

**Comment:** There are no provisions for phasing down timber harvest levels. BLM should consider a one-decade departure from the non-declining harvest level.

**Response:** BLM's sustained yield mandate makes no provision for such a phase down of planned harvest PSQ. BLM lacks such authority, other than for a departure which would cause a negligible subsequent drop below sustained yield levels.

The stand conditions on lands available for timber harvest in the PRMP and overall plan objectives, would cause any significant departure to result in substantial drop in sustained yield levels in future decades.

## Appendix V

- Comment:** The practice is questionable, of logging patches of five acres or less, and of leaving a few green trees per acre (which might be genetically inferior but would likely overstock planted regeneration areas if not blown over first).
- Response:** We disagree. Patch harvesting using cat, cable, or aerial systems has been widely demonstrated to be practical in southwestern Oregon and is key to development of spatially diverse stands and the development of understory regeneration of the appropriate species. BLM expects to leave trees in units which reflect the range of genetic quality which exists in nature and to use stock from its genetic improvement program to maintain the genetic diversity and quality of forest stands. Research data indicates that, significant seed-in of natural regeneration, requires higher levels of retained basal area, than the numbers of trees proposed to be left in harvest units of the northern GFMA(1) or patches of the southern GFMA.
- (1) Williamson, Richard L. 1973. Results of Shelterwood Harvesting of Douglas-fir in the Cascades of Western Oregon. PNW-161. Pacific Northwest Forest and Range Experiment Station.
- Comment:** It is inappropriate to include "deferred" old growth areas and watersheds in the timber harvest assumptions.
- Response:** The O&C Act requires BLM to identify the sustainable harvest level. Deferred lands are still part of the timber harvest base and as such are correctly part of that calculation. The effect of the deferral of harvest on those lands is factored into the calculation.
- Comment:** Lack of trained silviculturists may be a barrier to implementing the proposed silvicultural activities.
- Response:** We recognize a need to modify our skill mix and provide or obtain additional training.
- Comment:** More detailed silvicultural prescriptions are needed.
- Response:** Due to the somewhat experimental nature of many prescriptions, they must be adaptive and variable from site to site, as we learn from our own experience and that of others attempting active ecosystem management.
- Comment:** It is difficult to determine how proposed silviculture will actually influence stand growth, yield and structure.
- Response:** The ORGANON model for southwestern Oregon was developed to predict the yields, species composition, and structural complexity of multiple- aged stands and many examples of multiple-aged stands are available in southwestern Oregon which arise from either management actions or natural disturbance. Modeling, together with the examples provided by past management, provide both an opportunity for retrospective silvicultural studies and hypotheses for further exploration through adaptive management.
- Comment:** Use of formaldehyde as a binder in fertilizers is illegal.
- Response:** The use of formaldehyde in fertilizers is not illegal. When selecting products for use, Federal agencies screen for the presence of formaldehyde and select products without it if they are similar in effectiveness. For aerial fertilization, only pelletized fertilizers are considered highly effective because their weight carries them through the canopy to the forest floor. The only binder commonly used for pelletizing is formaldehyde, which forms urea into hardened crystals that not only prevent dusting but protect against caking and provide slow release of the fertilizer.
- Comment:** The court injunction on BLM's use of herbicides has not been lifted.
- Response:** As long as the injunction remains in place, herbicides will not be used. The probable sale quantity (PSQ) is not dependent on the use of herbicides.

- Comment:** The plan makes no allowance for failure to meet timber production goals that hinge on the success of intensive management practices. Past efforts to increase yields through intensive management have fallen short of expectations.
- Response:** Table 3-T-6 displays the timber sold for the decade of the 1980s as compared to the level supported by basic reforestation and by specific intensive forest management practices. When growth enhancing practices were not funded or accomplished, no increase in harvest was claimed or taken. The surplus of volume supported by silvicultural investments over the Decade exceeded sale levels by 347 MM board feet.
- Comment:** The PSQ should be reduced to reflect realistic assumptions for funding intensive management practices.
- Response:** Annual timber sale levels will be adjusted to reflect any sustained shortfall in funding for the intensive management practices on which the PSQ is partly contingent. The PSQ itself properly identifies the level of harvest that is biologically sustainable given the agency's management direction.
- Comment:** We believe it would be helpful if the probable sale quantity (PSQ) were reported by land allocation and by intensive management practice.
- We suggest a tabular display be used to report the PSQ on both a cubic foot and board foot basis, we also suggest that the long-term sustained yield (LTSY) be displayed in the Tables.
- Response:** This was displayed in the Draft RMP. The final also shows PSQ by SYU. Lands available for timber harvest are also displayed by major land use allocations.
- Comment:** BLM timber inventories including operations inventory and the intensive inventory have a number of deficiencies for both land use planning and activity planning. Inventories should be stratified based on satellite imagery and ecological type data. Volume and other data describing structural complexity, species composition, and ecological type are needed for each OI unit. BLM should better describe the deficiencies of its inventories in the PRMP document.
- Response:** BLM has established a statewide inventory group to work on design of inventories for the next decade. Overall improvements in Federal forest management data and procedures is being developed by implementation teams for the Clinton plan. In addition to the discussions of inventory data contained in the PRMP documents and the analysis of the management situation (AMS), discussions of how inventory data was used in PSQ determination occur in the document "Modeling the Future Condition and Yield of BLM Managed Forests", available from the Medford District BLM.
- Comment:** Table 3-T-5, Footnote #2, indicates wild stands would not yield increased growth if subjected to standard commercial thinning prescriptions. Is this consistent with PSQ yield curves?
- Response:** Analysis of stands for commercial thinning entry with conventional silvicultural prescriptions over the last decade indicated that commercial thinning did not provide a yield increase for wild stands as compared to regeneration harvest of those stands. For the Preferred Alternative (PA) and Alternative C, many of these stands are scheduled for heavier commercial thinnings designed to improve stand vigor, reduce mortality, and provide structural complexity. These entries were not designed to optimize timber volume production during ORGANON simulation. Limited empirical data indicates that ORGANON is under-predicting thinning response and that timber volume production will be higher in thinned wild stands than the levels indicated in yield tables.
- Comment:** No clearcutting should be included in the Preferred Alternative and none should be hidden under other names including regeneration cutting. True uneven-aged management and light thinnings should be the only harvest actions considered.



## Appendix V

- Response:** The Preferred Alternative places emphasis on thinnings for the next decade. No clearcut harvests are planned, although salvage actions following wildfires or other large scale mortality episodes may result in units which retain few living Frees. Batch harvest units of various sizes, generally under 5 acres in size, will include a structural retention element in the prescription (see the Silvicultural Appendix). Degeneration harvesting does not refer to clearcutting but to a structural retention harvest which results in significant understory regeneration of the preferred species. While some stands on the District may be managed under harvest regimes that resemble classic uneven-aged prescriptions, most stands will be managed under regimes that contain multiple-age classes, each arising from specific harvest or other disturbance events. Attempts to manage the forest types on Medford District under Q-distribution or other classic uneven-aged theories would result in significant seral shifts into ecological conditions which are not stable, would not achieve the objectives of the land use allocation, and would not resemble natural stands or provide the habitat of natural stands.
- Comment:** Density Management in reality, is thinning, and it may have a legitimate place in the management of the old-growth emphasis area (OGEA), but much more research needs to be done in older stands before it is applied aggressively. Only the Roseburg District gave a separate figure for density management, all the other Districts combined it with thinning. Since this practice is poorly defined in the various Draft RMPs, and given the inventory definition of old-growth, a lot of old-growth could be very heavily impacted losing its habitat value and yet still be counted as old-growth. This is not to say that this will be your actual practice, but it appears it could be. Density management must be better defined and the actual amount planned per year clearly stated. Until the long range research is completed, we suggest in the OGEA, no more than 8% of the basal area be taken in a 25 year period to 12% in 40 years. This would be by single-tree selection or very small group selections up to 1/2-acre. As suggested for the PA, we feel that the connective areas should be combined with the OGEA and managed as part of the OGEA. This would allow them to act as true connective paths and not be broken up with large clear cuts.
- Response:** The estimated acreage provided for density management in the LSRs is for impact assessment purposes and provides an upper estimate of the level of activity in the next decade. Actual acreages and treatment prescriptions will arise from LSR assessment and timber sale planning exercises.
- Comment:** I call your attention to an apparent discrepancy on page 2-47 of Appendix, Volume II. Under Old-Growth Emphasis Areas, there is the statement "Computer simulation and knowledge of ecological processes indicate that approximately 1 million board feet (MMBF) would be harvested from density management harvests on approximately 200 acres per year or 9.6% of the total acres in the OGEAs per year over the next decade. " Old-growth forests contain between 25,000 and 45,000 board feet per acre depending on the soil productivity. Thus, a harvest of 1 MMBF from 200 acres would remove 5,000 board feet per acre or 11% to 20% of the stand. This seems appropriate for density purposes. However, 200 acres is only 0.096% of the 207,600 acres in the OGEAs. If the 9.6% figure is correct, this implies a harvest of 100 MMBF per year; which means that the 105 MMBF in the Preferred Alternative will come from the OGEAs.
- Response:** The statement has been modified to show that the correct numbers are a harvest of 1 MMBF from 200 acres.
- Comment:** Management of OGEAs as described in the Draft RMP is inappropriate.
- Response:** This approach is no longer part of the proposed plan.
- Comment:** "Umbrella goals" need to be added to the Draft RMP to describe what management will be trying to accomplish.
- Response:** The Draft RMP has been rewritten to define objectives.

- Comment:** Use of chemical fertilizers and herbicides should not be included in the Preferred Alternative and no yield increase should be attached to these practices. Not enough is known about the effects of these practices on the dry sites of southwestern Oregon to justify their use. The treatment of the herbicide use issue in the document is inadequate.
- Response:** The overall approach for the Preferred Alternative is one in which the primary focus for management will be on understanding and utilization of knowledge about natural ecological processes in designing management actions (see the revised Silvicultural Appendix). Herbicide use is analyzed in the statewide Vegetation Management Environmental Impact Statement (EIS). The decision coming out of that analysis was that the emphasis for vegetation management would be placed on ecosystem-based management strategies that prevented, in so far as possible, the need for direct treatment of competing vegetation. Yield assumptions associated with fertilization and vegetation management strategies are developed using models based on southwestern Oregon data and provide yield estimates for fertilizer which are generally lower than estimates for sites north of Roseburg.
- Comment:** RMPs should include specific, measurable prescriptions or standards, that when implemented, would work toward meeting the expected future condition. While prescriptions are part of each draft plan, it is not clear how they will meet the short and long-term goals of biological diversity.
- Response:** The Proposed RMP is written to describe management actions on a broad scale. Specific, measurable prescriptions are more appropriately described in an activity level plan. The SEIS Monitoring and Evaluation Plan, when completed, will provide the method by which the questions of biological diversity and other goals will be judged.
- Comment:** The most flawed element of the Draft RMP/EIS is the contradiction of having ecosystem health and stability as the primary objective of the BLM (which is as it should be), and the calculation of the PSQ for the southern general forest management area (GFMA) based on economically driven timber volume commitments to private industry. Operations in the GFMA must not be guided by a PSQ plan. Instead, an area control type plan should be used to determine ecosystem manipulation based primarily on ecosystem health and stability.
- Response:** Probable sale quantity (PSQ) is calculated for sustained yield units which include all contributing land allocation polygons. The computations is based on application of defined objective-based silvicultural systems. Restoration of ecosystem Health and stability is a primary objective for the southern GFMA. Volume will be applied to specific parts of the sustained yield units through objective-based landscape analysis.
- Comment:** In our opinion, none of the Draft RMPs adequately addresses insect and disease concerns. Coverage is superficial and vague, and the plans as written, strongly imply that insects and diseases are not important. We are particularly concerned about the following points:
- a) Insects and diseases are not mentioned in any issues or concerns. Forest health is mentioned peripherally, but the insect and disease components are for the most part, ignored. Existing conditions of insects and diseases in management areas are not addressed or are superficially addressed (with the exception of the Klamath Falls Resource Area Plan), and quantitative data (that is available) are not included. Monitoring of insect and disease effects will be impossible since there is no base-line for comparison. Little or no effort is made to project effects of new management practices on future insect and disease impacts. Some of the proposed management changes will affect insect and pathogen populations profoundly.
  - b) Many of the plans refer to insects and diseases as "natural components of the ecosystem" and seem to imply that under that reasoning, there is little need to consider their management. While it is true that insects and pathogens are natural ecosystem components, so are fires, vegetation that competes with trees, animals that consume trees, heavily stocked stands, etc. We suggest that insects and pathogens are "agents of change" that should concern the forest manager just as much as those other forces that managers traditionally attempt to influence.

There certainly will be cases where active management of insects and diseases will not be desirable but, in such cases, a competent manager should know the consequences of the No-Action Alternative. As the plan now stand this will not be the case.

c) The plans repeatedly indicate that control methods will be applied to insects and pathogens if large outbreaks develop. We believe this is a poor way to manage insects and diseases. The preferred method of managing populations of insects and pathogens is to use a prevention approach with the goal of never allowing epidemics to develop. Integrated pest management techniques, including silvicultural manipulation of stands to prevent the development of conditions favorable for damaging population increases, is our preferred method.

d) The plans address the need to practice very intensive forestry on areas being managed primarily for the timber production objective. Thinning, use of genetically superior planting stock, competing vegetation management, etc., are advocated as methods to increase production. Use of proper management techniques for insects and diseases should be included as important methods for reducing timber growth loss and mortality.

e) Effects of insects and diseases on management objectives other than timber production are hardly mentioned at all. At the very least, the potential impacts of insects and diseases on these objectives should be outlined and estimated.

**Response:** Insect and disease concerns were included in a Forest Health section in the Draft RMP. This topic has been integrated with Biological Diversity in a new section of chapter 3 and 4 in this PRMP/FEIS. The PRMP contains specific goals for improvement in stand condition and ecosystem resiliency which are designed to reduce the levels of insect and disease related mortality that have occurred over the past decade. In addition, the Silvicultural Appendix provides perspectives on general standards for inclusion of insect and disease risks and potential risks in treatment prescriptions.

**Comment:** A sensitivity analysis carried out shows that an increase in PSQ could be realized if the MHA constraint was released. This increase amounts to 14.9 MMBF. The data in the DRMP/EIS does not indicate to what age the MHA would drop if unconstrained.

We have recommended to the State Director that the guidance for the Preferred Alternative be amended to include one of the MHA options described above. Such a change could add upwards of 14.9 MMBF to the PSQ and help make a most difficult timber supply situation for timber-dependent communities and industries in the Medford District more tolerable.

**Response:** While lowering of the minimum harvest age would increase the PSQ, seral diversity and wood quality objectives would not be met without this constraint.

**Comment:** Certainly the recognition that "different climates and forest types" within the District call for specialized approaches to management and use, they are important factors, and are long overdue in application. But greater innovation is needed in the ways in which these differing ecosystems are husbanded.

**Response:** Adaptive management will provide a mechanism by which new management techniques can be tested. Experimental design will vary to account for differing plant communities.

**Comment:** The stated goal of the Preferred Alternative is to manage for biological diversity and ecosystem maintenance. Alternative C has been called the biological diversity alternative and it calls for 92,700 acres of managed stands to attain old-growth definitions in 100 years (pp. 4-27). The PA calls for only 1,700 acres of managed stands to attain such definitions. This is a large discrepancy. How then is the PA really managing for diversity across ecosystems? We urge management for old growth to a larger extent than proposed.

- Response: Increased emphasis on meeting ecological objectives has been added to the Proposed RMP (see the revised language in the Silvicultural Appendix).
- Comment: RMPs should include specific monitoring questions for measuring whether management prescriptions are meeting the expected future conditions. For example, is forest age-class distribution within a certain forest allocation moving toward or away from the expected future condition? BLM plans should integrate management, monitoring, and research to continually apply adaptive management and improve the scientific bases for ecosystem management. BLM Districts need to develop more comprehensive monitoring plans to measure the long-term commitment of ecosystem management.
- Response: The monitoring plan has been rewritten to include a more relevant monitoring section.
- Comment: Current scientific opinion demonstrates the lack of baseline data for sound total ecosystem management.
- Response: Inventory is an area of emphasis under the Proposed RMP. Anytime a decision must be made, what is known about the subject is considered. Inventory of current conditions along with monitoring are integral parts of adaptive management.
- Comment: The entire section on "Effects on Biological Diversity", including all Figures and Tables, is virtually incomprehensible when it comes to trying to discern impacts to BLM lands only or to all ownerships in the planning area. The Figures and Tables are not labeled adequately as to whether they apply to BLM lands, to the entire landscape, or some other combination. A clear, concise conclusion needs to be developed which summarizes the situation on BLM lands, and then expands the discussion to detail the contribution of each Alternative to biological diversity at the landscape level encompassing all ownerships.
- Response: The "Effects on Biological Diversity" section for the PRMP has been rewritten to expand upon and clarify earlier analysis.
- Comment: Continuing to harvest by clear cutting, shelterwood, and even-age cuts, and stocking with selected species for maximum timber production is not maintaining a forest with its myriad animals and plants, it is simply creating a crop for future exploitation.
- To my mind, priorities should be altered. Timber extraction should not remain the be-all and end-all of our forests. Their many other values should finally hold sway, and restoration of lands that have been damaged or degraded should be the major focus in the next decade.
- Response: Timber production is only one of the goals and objectives of the PRMP (see the revised Silvicultural Appendix).
- Comment: All timber lands should be managed/harvested in a manner that will result in multi-storied, multi-specied (including hardwoods) forests, interspersed with clearcuts not to exceed 6 acres (at a ratio not to exceed 1 acre clearcut to 5 acres multi-storied management). This would satisfy the requirement of connectivity areas, wildlife habitat, sufficient protection for most endangered species, provide sufficient canopy and vegetation to reduce if not eliminate soil erosion, thereby protecting water quality, while providing timber thinned from the multi-storied forest and clearcuts
- Response: The management approaches described in the Silvicultural Appendix are designed to meet the objectives of the PRMP and to permit adaptation to deficient site and stand conditions.
- Comment: Apparently, everything would be considered except ecosystem health in reforestation practices. If you artificially reforest, aren't you short-circuiting early seral stages?

## Appendix V

**Response:** Maintenance or restoration of ecosystem health is one of the considerations in choosing reforestation, site preparation, and stand establishment treatments.

**Comment:** Do you install properly designed water bars on skid trails? When cat logging on gentle ground, do you designate skid roads and minimize percentage of sale to be used as skid roads?

**Response:** A set of best management practices (BMPs) has been developed to maintain and improve, water quality and soil productivity. BMPs will be prescribed and implemented based upon site-specific conditions and are described in Appendix 2.

**Comment:** Conifer stands that are economically marginal, should be inspected to determine the reason for their poor growth prior to any decision to harvest. Marginal stands may be marginal as a result of micro-climate or poor soils, which would inhibit any reforestation attempts.

**Response:** Chapter 3, Section discusses economical and marginal timber stands. All stands in this category were examined for reforestation suitability and were classified as reforestable.

**Comment:** BLM has been too conservative in analyses dealing with water quality, wildlife habitat, and biological diversity, in assuming that all private lands will be managed on intensive short rotations.

**Response:** While private landowners may manage their lands in a number of different ways in the future, and while the regulatory structure governing management of these lands may change over time, the extent of such changes are uncertain. The fluctuating economic realities of the marketplace will probably continue to strongly influence private land management. By assuming that future management on private lands will continue to rely on shorter rotations and will employ objectives weighted toward timber production, BLM may be conservative.

If private land management on parcels intermingled with BLM section changes significantly over time, future BLM plans would be adjusted for changed habitat conditions within the entire landscape.

**Comment:** Total standing timber inventory volumes are 17% higher in the 1988 inventory than in the 1976 inventory. This increase happened while BLM was cutting over 170 MMBF/year over the same period on the Medford District. This does not sound like over cutting to us. It sounds like a model of sustained yield forestry.

**Response:** As explained in Chapter 3, timber inventories conducted in different decades cannot be compared and do not represent an accurate estimate of the differences between volume growth and volume harvest during the previous decade. As shown in Table 3-T-6, there was a computed surplus of 347 MMBF of volume produced over volume sold, for the period during the decade.

**Comment:** BLM operates under laws and regulations which require production of goods and services of all types. People are part of, and are dependent on, BLM-administered ecosystems. BLM plans should describe the linkage and dependency (social, economic, spiritual) of local and regional communities, groups, industries, etc., on ecosystems within each land allocation.

**Response:** See Table 4-T-3 for a summary of economic effects and the impacts sections dealing with socioeconomic conditions and rural interface areas.

**Comment:** Given the greater protection afforded by Alternative E, the statement that landscape connectivity would be greatest under Alternative C, the PA is incorrect.

**Response:** Alternative E provides for the continued management of nonreserved lands under intensive even-aged systems which would tend to perpetuate existing fragmentation. Alternative C and the PRMP provide for younger stands to be managed with thinnings and green-tree retention harvests, which will speed the restoration of connectivity in the entire landscape.



**Comment:** Timber supply is the primary driver of the BLM socioeconomic analysis but does not appear to be an important part of Alternative formulation in the draft plans. One would have expected BLM to use this analysis as an integral part of developing plan Alternatives. The potential exists to use the analysis as a key decision criterion for the Record of Decision.

**Response:** The plan Alternatives were designed to test the effects of a range of alternatives from those strongly based in timber production to approaches oriented toward protection of nontimber values. The PA was designed to strike a successful and reasonable balance between conflicting values.

**Comment:** Rather than the age-based definitions of old-growth habitat utilized by BLM in the Draft RMP, BLM should inventory its lands using the minimum criteria found in PNW-447 and/or GTR-285. The forests of southwestern Oregon are multiple-aged and have been extensively impacted by logging and natural disturbance. Consequently, any age-based classification of seral stages have a number of weaknesses. However, PNW-441 states that "transition from the mature to the old-growth stage is...not usually apparent in Douglas fir stands until they are 175-200 years of age." In addition to the age-based definition, Medford District classified older stands into a series of intactness classes (see Table 3-V-3), which provides an indication of the extent to which mature old-growth stands would retain the functions expected in later seral stages.

BLM has considered but not completed a reinventory of its lands that would identify those stands that meet or exceed the minimum standards given in the above two publications. An identified weakness of these definitions as applied to actual stands is the considerable variation in structure and age within older stands, and lack of knowledge of the biological meaningfulness of the definitions. The section of GTR-285 by Bingham and Sawyer, titled "Distinctive Features and Definitions of Young, Mature, and Old-Growth Douglas-fir/Hardwood Forests," provides a perspective on the variation that exists within age-based seral stages in southwestern Oregon and northern California. Subsequent chapters of that publication indicate the degree to which wildlife species utilize different seral stages. Wildlife use of different seral stages differs primarily in terms of relative abundance of species found within the different stages.

**Comment:** All Alternatives, except Alternative E, will continue to fragment older forest habitat islands, and will have adverse impacts on both connectivity and on the viability of old-growth dependent and associated species. We oppose any further harvest of older forest types.

**Responses:** The President's plan is designed to maintain the viability of old-growth dependent species through a system of reserves and connectivity blocks.

**Comment:** Why is the target stand for the southern GFMA "minimum" ecological old-growth? With the plan for management to be so intensive in the northern GFMA, we feel it is important to manage for more than the minimum in areas where old-growth characteristics will be retained. This target should be at least average, and the target within OGEAs should be maximum ecological old-growth, if we truly want whole ecosystem management (see pp. 2-108, Table 2-21). Minimizing leaves out the best in an ecosystem and fails to meet the PA goal of maintenance of ecosystems and a diversity of species.

Why target trees of "average" quality for retention in harvests in both the southern (Appendix, pp. 2-45) and northern (Appendix, 2-44) GFMA's? Especially in the northern GFMA where only a few are being left. The PA acknowledges increasing mortality rates due to disease and drought. The planning area has already been high-graded in past management practices and current private practices. That means the best is already gone in many instances. So the average should represent less than average of the original natural condition. If we truly want to fight disease and improve the health and quality of the ecosystem, it is essential to retain the best quality trees, which is the prescription in new forestry techniques. We also feel that the retention of just 6-8 trees per acre is inadequate in a plan that is saying it will manage for biological diversity and ecosystem.

## Appendix V

**Response:** The objectives for the north and south GFMA's have been redefined for the PRMP. Target stand characteristics are outlined in the Silvicultural Appendix and are designed to meet the objectives for the land use allocations. The selection of green-tree for retention will be designed to proportionately represent the species, qualities, and size ranges exhibited by larger trees in the original stand.

**Comment:** Reconcile the inconsistent statements describing future seral stage conditions and the impacts of those conditions on biological diversity.

The agency claims that..."under the regimes proposed for Alternative C, 92,700 acres of managed stands would attain old-growth definitions in 100 years, an increase of 48% in old-growth over what would be available based on age alone in the total landscape. Under the regimes proposed for the PA, 1,700 acres of managed stands would attain old-growth definition in 100 years, an increase of 1% in old-growth over what would be available based on age alone in the total landscape." (Page 4-27)

It is unclear what "based on age alone" means, but the numbers demonstrate that Alternative C will produce approximately 91,000 additional acres of old-growth. Yet the Figure 4-BD-2 shows that Alternative C will provide only 5% more old-growth after 100 years than will the PA. A difference of 5% of total available forestland, is approximately 35,000 acres, not 91,000. Is this discrepancy merely an error in calculation, or does it describe a completely different scenario?

Headwaters has carefully tried to make sense of the terms and classifications used in the Draft RMP in its analysis of the later seral stage inventory and the subsequent impact on biological diversity. Unfortunately, the display of figures and discussion of these issues is so inconsistent, unsupported and downright contradictory, it makes investigation and thoughtful analysis virtually impossible.

**Response:** Silvicultural systems have the potential to result in the development of stands with structural and floristic characteristics that meet or exceed the minimum definitions for old-growth within time frames different from those of unmanaged stands. This does not mean that the stands would have the same biological potential as unmanaged old-growth. The biological diversity section has been revised to better define the differences between unmanaged old-growth and managed structurally complex stands.

**Comment:** In the southern GFMA, "Silvicultural prescriptions have as objectives the retention or restoration of ecosystem health and stability while maintaining moderately high levels of resource production." If this is true, why let the amount, timing, and location of management activities be driven by the PSQ level and PSQ modeling assumptions? We suggest an area control regime be developed with ecosystem concerns driving the amount and location of manipulation, with the resultant flow of timber production as a variable byproduct.

**Response:** PSQ is a result of the application of silvicultural systems designed to achieve land use objectives, such as the restoration of stand vigor, to the existing forest.

**Comment:** Upon reforestation, plant indigenous hardwood species.

**Response:** The PRMP provides for the retention of hardwood species within harvest units. In this area most hardwoods sprout vigorously. There is in most cases no need to plant hardwood seedlings to have the species remain a stand component.

**Comment:** Our own Forest Creek in your Middle Applegate Watershed #19 has suffered drastically from imprudent BLM "harvesting." The Belle Sale clearcut on the north slope of Mt. Isabelle is still denuded, not even supporting brush cover or other woody plants. The soils in this area are extremely thin and shallow, making replanting extremely difficult. BLM's survival rates for replanting this region are said to be 20% or less.

- Response: With the exception of scattered salvage, the BLM has not harvested timber in the area you describe since 1987. All BLM units in this area meet target or minimum stocking standards (60% or greater). However, there has been recent timber harvest on private lands nearby and there are nonforested areas on Mt. Isabelle.
- Comments: If all the restrictions were lifted (owls, murrelets) and many others, what would the plan provide for timber? The final plan needs to display those numbers so the public can quantify the costs associated with them.
- Response: Proposed RMP Alternatives are designed to meet sets of resource objectives within defined silvicultural systems. The range of Alternatives is designed to permit evaluation of the costs and benefits of meeting these objectives.
- Comment: Table 3-SE-2, page 3-119, shows that people don't want two things, clearcuts and poor water quality. If the BLM addressed those two items and produced a plan, what would the PSQ look like?
- Response: The design of the PRMP recognizes these concerns and has a PSQ of ??????.
- Comment: The BLM should inventory and classify all of its lands according to the "Plant Associations," developed by Tom Atzet, who is with the U.S. Forest Service.
- Without a thorough classification such as this, that is also employed by the Siskiyou and Rogue River National Forests, it will not be possible for the BLM to fully protect biological diversity.
- Response: BLM has cooperated with the USFS and Oregon State University, during the Forest Intensified Research (FIR) Project, to produce a comprehensive classification system for the potential vegetations of western Oregon. This work is incomplete, however, BLM is proceeding with geographic information system (GIS) mapping of both potential and current vegetation.
- Comment: The harvest scheduling and PSQ calculations for the Draft RMP are based on a premise that the non-declining yield constraint limits harvests for the first decade. Given the emerging concerns over threatened and endangered species, watershed protection, and other cumulative effects, this premise may be false. On most National forestlands in western Oregon, the first-decade harvest acreage is not limited by the requirements to meet existing standards and guidelines. In the past few years, the available timber management acreage has declined with the removal from the base of relatively undeveloped areas (e.g., spotted owl, HCA's, etc.). The areas that remain in the base are generally heavily impacted by past cutting and cannot be harvested now at their long-term sustained-yield level. On BLM lands, which are often intermingled with private ownerships, the short-term harvest limitations may be as severe.
- Response: The term "de facto withdrawal" refers to interim decisions during the past decade to defer harvest on certain tracts because of environmental impacts. These deferrals did not affect potential long-term sustainable timber harvest levels, because they did not affect forest growth or yield. The computed harvest level for the PRMP, considers the effects of harvest deferrals in watersheds with high levels of cumulative impact and landscape levels, and limitations in harvest in connectivity blocks.
- Comment: The BLM should design and display a clearly written accounting system that would track and document accountability and compatibility of actual operations with the PSQ plan for a more accurate understanding of the Agency by the public. This should be done on an annual basis.
- Response: Year to year accomplishments are tracked in the MICRO\*STORMS, and Timber Sale Information System (TSIS) record keeping systems, and are summarized in yearly monitoring reports.

**Comment:** "Salvage volume would be substituted for regular green volume and would have no effect on sustainable timber yield." This indicates a lack of concern regarding maintaining accountability with an approved PSQ plan. Sustainability would be maintained and demonstrated only if timber volume removals occur in a manner consistent with assumptions made in the PSQ computation. Repeated salvage entries certainly change the pattern of flow of volume from affected stands, which can diminish final harvest volumes when it occurs, and can be a self-perpetuating program by causing continuing mortality due to the physiological shock to individual trees and logging damage to the residual stand. Since salvage operations remove material that will become future snags and down logs, it would appear that such operations should only be undertaken after a careful explicit analysis of the long-term needs for maintaining such stand components.

**Response:** Emphasis in the PA is placed on restoration of forest health and ecological conditions that minimize the chance for catastrophic stand loss, and assume the retention of snag and down wood components of stands. The provision for substituting salvage volume for green volume is designed to assure that harvest levels are not inflated from time-to-time, by selling both regular sales and salvage sales at levels above the long-term sustainable level, and to help assure that time is available for high quality timber sale design work.

**Comment:** Although "salvage" per se is not mentioned in the Draft RMP, various reliable sources have informed us that timber generated in this manner has been calculated as part of the PSQ. This is wrong. The term "salvage" must be defined and classified. At the optimum, salvage should be used on a site-specific basis only. All detrimental aspects must be addressed. Although salvage logging has its place within the proper prescription, it cannot be regarded as a fix-all.

**Response:** Salvage is discussed within Chapter 2 and the silvicultural appendix of the final PRMP. While tree mortality at levels above that forecast by models was used in yield table construction, salvage of mortality volume was not included in yield tables used in PSQ computation. If additional mortality volume is harvested in salvage operations, the volume harvested as green sales will be reduced by the same amount to help assure ecosystem sustainability.

**Comment:** Green tree retention guidelines are exaggerated and do not take into account the species diversity and natural regeneration representative of southern Oregon forests. Because most sites have a tendency to become overstocked naturally, these guidelines are overstated and should be reviewed. We refer BLM to the addendum "A Critique of the Modeling Used -State Director's Guidance."

**Response:** The retention of large green trees is designed to meet biological and structural objectives in stands developing after regeneration harvests.

**Comment:** Clear cuts, shelterwood, and seed tree harvesting methods are still major components of the PA, which seems to spell business as usual in how production will be pursued.

I do not understand how concern for long-term biological diversity can be given serious consideration, if such harvesting methods with their egregious results are permitted.

**Response:** The silvicultural systems used in the PA have been redefined in the Silvicultural Systems Appendix in this PRMP. Emphasis is placed on thinning younger stands, management of younger stands, and landscape to meet ecosystem objectives. While classical even-aged management techniques will not be used, managed stands, like natural stands, will consist of distinct age-classes arising from disturbance.

**Comment:** The remaining forests are worth more standing than cut. Products can be extracted from the forest by the same thinning process and program that works to restore the balance of forest types. Hire more labor to do this, (new jobs, same industry). Possible jobs and uses of the forest (beyond just timber harvest for the building trade): forest mushrooms, herbs, medicine barks, etc., decorative wreaths and bows, needles and maidenhair fern baskets, bent maple chairs,

hardwood floors, tamom baseball bats, elderberry wine, blackberry jam, smoked ham, acom mush pancakes, ice cream, etc.

- Response:** The Special Forest Products section of the PRMP has been rewritten. Opportunities for harvest of vegetation can be found in Chapter 4. This type of work is usually accomplished by competitive bid.
- Comment:** Plantation grazing is an excellent management tool to achieve vegetative control and increased moisture availability for tree growth. Cattle can be an excellent tool to control grasses, etc., with properly timed grazing, without detrimental effects to the survival of grass or trees. Studies conducted by Oregon State University have over 20 years of data collected in northeast Oregon and five plus years by the Medford District BLM. Weyerhaeuser Company has also concluded that cattle and trees are compatible. Research on plantation grazing supports the concept that it can be beneficial for tree growth. We urge the Medford District to use this concept in its silvicultural practices.
- Response:** Plantation grazing has been practiced to a limited extent on the Medford District. When properly applied, it has been found to be an effective method of vegetation control. Grazing is one of the tools available for vegetation control under the PRMP and vegetation management ROD.
- Comment:** The PA anticipates mortality rates similar or higher than the past decade. There are plans to salvage harvest. We see a need for a best management practice (BMP) for salvage operations, especially after fire, to reduce or prevent further damage to stressed soils by machinery or removal of too much debris. This is also an area that could use research, especially restoration after fire.
- Response:** A set of BMPs have been developed for activities, including salvage, that may affect water and/or soil quality. Levels of coarse woody debris to be retained on the site are discussed in the Silviculture Appendix.
- Comment:** Are the harvest levels projected for the various Alternatives calculated under a formula on nondeclining even-flow for suitable forestlands? What period is required for the forest to achieve an even distribution of age classes?
- Response:** The harvest volumes projected for each alternative and for sensitivity tests are projected based on the long-term sustainability of the harvest volume forecast from the suitable lands allocated to timber production and tested over a period of 400 years. This volume does not include a provision for a "phase-down" or other temporarily high level of harvest. For all Alternatives, harvest volume computations occur using a mixture of yield tables reflecting different silvicultural regimes, and rotation lengths. Harvests from different allocation units are scheduled within TRIM in terms of priorities and availabilities of acres for harvest. Within such an analytic framework, a single even distribution of age classes is not created. See Chapter 4 for a discussion of the future age and structural class distribution of the forest that would exist in the future under the various Alternatives.
- Comment:** Given the new management direction inherent in ecosystem management, new silvicultural systems and uncertainties inherent in the application of research-based information to specific sites, BLM should define the range of uncertainties in outcome for the Preferred Alternative and should clearly define the risk that timber volume or structural targets might not be met because of funding shortfalls or errors in the research data base.
- Response:** There are uncertainties about the results of application of the silvicultural systems utilized in design of the PRMP in terms of timber volume production, the quality of wildlife habitat, and in water quality. Application of these approaches will take place within a research and monitoring framework that will provide feedback on the success of the approaches and permit plan revision as needed. Under the PRMP, standing timber volume tends to increase over time and could provide for future increases in harvest if after ecological and wildlife objectives are permitted. If



management practices are not funded, volume dependent on those practices will not be offered for sale. However, failure to fund silvicultural practices would also result in failure to produce the forest structures and stand arrangements on which ecological processes and wildlife habitat is dependent. The PSQ for the Medford District is conservatively determined. The harvest lever would be higher if minimum harvest age was allowed to fall below culmination of mean annual increment (CMAI) or if volume gains were claimed where uncertainty exists about the effect of silvicultural practices (i.e., fertilization, and genetic tree improvement in the southern GFMA).

**Comment:** BLM should explain the use of existing stand data as opposed to the use of ORGANON simulation in determination of a PSQ.

**Response:** These details are available in the document, "Modeling the Future Condition and Yield of BLM Managed Forests," available at the Medford District BLM office.

**Comment:** Harvest targets should be determined based on area control strategies rather than being determined based on the sustainability of timber volume, with the timing and locations of treatments being determined by characteristics of the stand and landscape.

**Response:** PSQ is determined based on the use of a silvicultural system designed to meet a variety of stand objectives including objectives of ecosystem health. This involves use of harvest schedules that provide a level of landscape control within TRIM, including planning which age classes should be entered, deferral of harvests in some watersheds, and metering of harvest acres in connectivity blocks, to assure that landscape-level goals are met. Concerns about volume sustainability and other factors relating to the technical defensibility of the analysis required that TRIM\*PLUS volume control be retained for the final.

**Comment:** Sustained yield principles were violated by BLM's use of an allowable cut effect for the previous decade, and continued use of the allowable cut effect (ACE), will result in continued violation. There is mismatch in claimed results and actual achievements in the accomplishment of intensive practices.

**Response:** ACE refers to the increase in current harvest levels that are possible because of stand management. If more volume is available in future decades, current volume can be harvested faster without running out of available volume in the long-term. In previous plans the ACE was higher. One of the reasons for this was that minimum harvest age was set at 60 years. When minimum harvest age is set at higher ages, as in the PA, then existing stands must be carried over a longer period of time, reducing the ability of silvicultural treatments to result in a higher harvest in the next decade.

**Comment:** Taxpayer dollars should not finance speculative, costly investments in even-aged management. The economic analyses supporting the PSQ should be revisited.

**Response:** See the wood quality appendix BB for a discussion on silvicultural investments, yield gains, and wood quality.

**Comment:** The level of planned accomplishments in intensive management practices for the PA are unrealistic. PSQ should be recomputed based on attainable levels of treatment.

**Response:** Some practices listed (precommercial thinning) affect PSQ, and some (underburning and pruning) do not. If those practices which support PSQ are not funded or carried out, timber sale levels will be reduced accordingly.

**Comment:** The development of monitoring standards for BLM lands needs to be upgraded, including development of a better yearly reforestation report, documentation of treatments, and treatment effectiveness through continuous forest inventory (CFI) and other data.

- Response: We agree. Significant changes are proposed in monitoring approaches, inventory methods, and reporting.
- Comment: Morel mushrooms (which happen to thrive in clearcuts) are one of the most prized species of edible fungi in our region. They are targeted for harvest by both commercial and recreational pickers.
- Response: The special forest products section of the Draft RMP has been rewritten for the PRMP. It contains objectives and management direction for resources such as morel mushrooms.
- Comment: BLM should use carefully designed thinning to increase the amount of future northern spotted owl habitat.
- Response: Through the use of commercial thinning, and other forms of density management, stands can be managed to achieve a variety of management objectives, such as creation of desired wildlife habitat, wood production, and increased stand vigor. Density management to achieve management goals has received emphasis in the PRMP.
- Comment: Our forests should be managed in a way that assures a healthy forest and a continuing resource of wood and pulp. This means getting away from the even-age management tree-farm approach, and into more thinning and selective cutting. It may be necessary to further reduce the allowable cut in order to achieve the restoration and protection these resources deserve.
- Response: See the Silvicultural Appendix for a discussion of the approaches utilized. Increased emphasis has been placed on commercial thinning.
- Comment: Restoration of our forests must include utilizing natural fire cycles, streamside replantings and major grass and tree replanting to control existing and potential erosion sites, and the closure and restoration to a natural state of unnecessary roads.
- Response: All of these are provided for in the PRMP. An estimated 1,800 acres/year are proposed for underburning. Selected management activities could occur within riparian management areas to achieve objectives such as stream/riparian enhancement or the enhancement of fish and wildlife habitat. Cutslopes, ditchlines, and fill slopes will be stabilized where appropriate on roads that are to remain open for public or administrative use. Reduction in the number of minor collector roads and local road densities will be emphasized in areas where road-related resource-value conflicts have been identified.
- Comment: If you select for any number of characteristics, you are ipso facto going to select other characteristics out of the pool. Nature selects only for survival on that site. Any selection you do is highly likely to weaken survival ability, especially since not all the characteristics that contribute to this are known. A careful reading of the Draft RMP indicates your goal is enhanced fiber production in the short run, not ecosystem health.
- Response: See Appendix 2-T-4, Draft RMP, for a discussion of these issues.
- Comment: The Draft RMP does not address how the Alternatives will affect the Pacific Yew resource, and gives no direction for the management and harvest of Pacific Yew.
- Response: A separate EIS prepared jointly by the BLM, USFS, and the FDA, addresses Pacific Yew management and the effects of harvest under different harvest regimes.
- Comment: Shrubs, in most forested systems, are a critical element of biological diversity. The Draft RMP plans do not address how this resource is impacted by the Alternatives, or how it will be retained in space and time. This is especially critical for stands intensively managed for wood production. Shrubfields are also a key element of diversity. Most references to shrubfields call for their conversion to conifer production. The role and value of shrubfields as wildlife habitat is ignored.

The Preferred Alternative should: 1) establish goals and objectives for the retention and maintenance of shrubs in forested stands, especially those intensively managed for wood products, and 2) identify the role and value of shrubfields as wildlife habitat and the processes which create them. An assessment to determine if any species are dependent on these shrubfields should be made. Goals, objectives, and prescriptions for maintaining shrubfields should be established as a result of assessment findings.

**Response:** The Draft RMP addressed the effects of the Alternatives on shrub species in the Vegetation section of Chapter 4, beginning on page 4-40. Management of shrub communities is described on page 2-55 in the Draft RMP. Natural shrub communities on suitable commercial forestland would not be converted to conifer production on the Medford District. The value of early seral vegetation as wildlife habitat is described on page 3-44 in the Draft RMP.

Management objectives and goals for the various land use allocations have been rewritten and are included in the PRMP.

**Comment:** Port-orford-cedar and its management is not adequately addressed in the Draft RMP.

**Response:** The DRMP describes the current condition of Port-orford-cedar and the introduced fungus, Phytophthora lateralis, which attacks the species, beginning on page 3-39, Volume I. The BLM and the US Forest Service are currently in the process of completing a management plan designed to maintain Port-orford-cedar and its role in the environment viable.

**Comment:** OGEAs are particularly problematic to SOTIA members. This special designation will promote overstocked, unhealthy forests, susceptible to disease, insect attack, and fire. OGEAs will not contribute to northern spotted owl habitat if the forest is allowed to deteriorate. The best way to provide stable owl habitat is to actively manage these acres.

**Response:** The forest is a dynamic community of plants and animals which survived for thousands of years without management. The LSRs are intended to provide a higher level of protection over the next few decades for species which have survived in unmanaged older forest types.

**Comment:** The Draft RMP fails to define forest health and address the issue.

**Response:** Forest health concepts have been combined with biological diversity concepts to provide an analysis relevant to the ecosystem health definitions used in FEMAT.

**Comment:** All 179,725 acres of Site V lands, pp. 2-8 in the Draft RMP, should be allocated to no cut classifications. Growth is slow, regeneration is a problem, the lands are often subject to erosion, and logging can be expensive. Sales on these sites are often deficit sales. The land is better used for water, fish, biological diversity, recreation, scenery and wildlife.

**Response:** Site Class V lands are proposed to be managed at a lesser intensity than higher site class lands. Lands classified as economically marginal have been excluded from the timber allocation.

**Comment:** In addition to discounting the fact that BLM lands have actually grown 17% more inventory in the past 12 years, pp. 3-106 in the Draft RMP, it also ignores the Forestry Intensified Research (FIR) data. While we are pleased that the TPCC reinventory includes the FIR data, it is difficult to decipher how this information was used. The forest products industry, in conjunction with Federal agencies, spent millions of dollars on this project. The Draft RMP should clearly reflect FIR's accomplishments and how the data was used.

**Response:** A description of how data from the Forestry Intensified Research (FIR) program was used can be found in Appendix 4-T-I, "Effects of Change in the Potential Suitable Commercial Forestland Base," beginning pp. 4-115 in the Draft RMP.

- Comment:** A more local problem in the Roseburg and Medford Districts is the tendency to "write-off" the low site class lands from timber production. Over 90% of southwestern Oregon forestlands are in the three lower site classes III, IV, and V, and over half of that are in sites IV and V. Yet about 40% of the State's timber harvest comes from this region. It has been demonstrated that by using the Knobcone X Monetary pine hybrid (KMX), a commercial timber crop can be grown on Site IV land in 25 years, further, that the volume per acre is greater than for Douglas-fir in 50 years. I am amazed that your personnel have shown no interest in trying to increase timber production on their predominantly low site class land with such alternative species and practices.
- Response:** While the PRMP proposes to manage lower site class lands (Site class V) in a less intense manner, they have not been "written-off." Introduction of new hybrid or exotic plant species generally does not fit the intent of ecosystem based management. Ecosystem based management emphasizes natural processes, structures, and native species.
- Comment:** We support the decision not to convert natural hardwood stands to conifer. However, we see an intent to manage hardwood stands for production at the rate of 1/200th of the total allocation area per year. Where is this allocation area and how many acres are included? What does production mean, does it include firewood?
- Response:** Management of hardwood stands and the hardwood component of conifer dominated stands is more completely described in the PRMP, Chapter 2 and in the Silvicultural Appendix.
- Comment:** We are adamantly opposed to the use of nonmechanical means for vegetation control. Not only are they controversial, they are expensive and have unwanted impact to other species such as fish, macroinvertebrates, and microfauna in the soil.
- Response:** Under the PRMP, a variety of silvicultural practices may occur to control unwanted vegetation with first priority being given to revegetative strategies which would avoid the need for treatment. Mechanical, manual, and chemical treatments may occur, depending on site condition. Not all sites are suitable for mechanical vegetation treatment. In some cases, units to be treated may be too steep to have motorized equipment such as tractors, caterpillars, or shredders treat the vegetation. Soil conditions may also limit the use of mechanical treatment. Historically, mechanical treatment methods have had some of the highest treatment costs. All methods of treatment may have unwanted impacts to other species as well as to the applicator.
- Comment:** In the Draft RMP/EIS, Volume I, page 2-55, the Preferred Alternative states that, "Natural hardwood and shrub communities on suitable commercial forestland would not be converted to conifer production. Stands on commercial forestland which are dominated by commercial conifers, but which also contain a high percentage of hardwoods as a successional stage, would be managed for timber production. Suitable commercial forestland allocated to timber management and dominated by grass, shrubs, and hardwoods, which resulted from human activity, would be restored to conifer protection."
- Our concern here is how the BLM defines human activity. Historically much of the vast oak savannahs of the pre-settlement era were maintained by Native Americans setting fires for hunting and agricultural purposes. If this were how the BLM defined human activity it would be licensing itself to convert much of its hardwood stands to conifer production. Also, it seems ironic that the word conifer "protection" is used if the ultimate purpose is to harvest the conifers plants.
- It seems clear that converting healthy diverse deciduous forest ecosystems to conifer plantations does not correspond with BLM's management objective of wildlife, range, and biological diversity.
- Response:** The "maintenance" of oak savannahs by Native Americans by fire would not be considered reason to convert hardwood stands to conifer production. Key to the meaning of the sentence in question is the words "suitable commercial forestland allocated to timber management". The

white oak woodlands do not fall into this classification. White oak woodlands would be managed to meet wildlife, range, and biological diversity objectives.

It is unfortunate that the word "protection" ended up in the Draft RMP. The word should have been "production". It somehow changed between the writing and printing of the document.

**Comment:** White oak woodlands are a rare and unique ecosystem. They and other hardwood stands should not be converted to other plant communities for commercial purposes. White oak woodlands would be managed to meet wildlife, range, and biological diversity objectives. Conversion of natural hardwood and shrub communities on suitable commercial forestland to conifer production is not part of the PRMP for the Medford District.

**Comment:** Is pruning really of economic benefit to the owners of public land?

Pruning is necessary for the production of high quality wood on shorter rotations. See the Wood Quality appendix BB, of the PRMP for a revised economic analysis. Present net worth analysis represent the net value after costs and revenues, and discounted to stand initiation.

**Comment:** We urge top priority for reforesting all lands logged in the past that are not currently back to optimum production.

**Response:** Reforestation of harvested lands has been one of the District's top priorities.

**Comment:** There should be a complete inventory of all previously logged lands to determine if reforestation is occurring at the predicted levels.

**Response:** The BLM maintains an inventory system called MICRO\*STORMS, to keep records of all units harvested or receiving other cultural treatments. Figure 3- T-2 displays the results of past reforestation efforts. Predictions are developed from actual data.

**Comment:** The goal of BLM for the future should be to allow as much land as possible to naturally regenerate, or adopt practices that so mimic natural tree death and regeneration, that there is no loss of soil integrity. The PA needs to shift further toward Alternative E in this area.

**Response:** The PRMP and Alternative C place emphasis on restoration, retention and utilization of natural ecological processes in forest management.

**Comment:** Revegetate clearcut areas.

**Response:** It has been and continues to be BLM policy to plant understocked harvested units with the desired seedlings as soon as the site preparation is complete. Refer to Chapter 3, Timber Resources, Reforestation Section, to Figure 3-T-2, and to Appendices 3-T-2, 3-T-3, 3-T-4, 3-T-5 in the Draft RMP.

**Comment:** The sections of the Draft RMP that describe the results of reforestation actions and intensive forest management practices are inadequate, fail to fully disclose program failures, fail to account for poor growth in some stands, inadequately describes variation in the spatial distribution of tress in reforestation units, mortality in genetics test sites, and the need for replants. Problems with intensive practices are a good reason for use of a silvicultural regime in the PA for the southern GFMA.

**Response:** We agree that reforestation should be more successful with the proposed changes in silvicultural systems. Reforestation assumptions utilized in PSQ determinations reflect actual experienced results, including the results of replanting. Some additional data has been added to the Appendices that deal with reforestation results. Additional data and a description of how stand data was used in PSW determination can be found in the document, "Modeling the Future Condition and Yield of BLM Managed Forests," which is available at the Medford District BLM office.



- Comment:** Biological diversity and ecosystem-management terminology used by BLM does not properly weight the values of retention of old-growth and mature habitat types, and have not been properly applied to an assessment of the sustainability of either species or ecosystem function.
- Response:** The biological diversity and forest health sections have been rewritten to correspond with the analytic framework of FEMAT. Those revised sections together with FEMAT, provide a more detailed description of the application of biological diversity concepts to analysis of the degree to which species and functions are retained by management options.
- Comment:** The Draft RMP boldly, although unconvincingly states, "The allowable sale quantity (ASQ) is projected at sustainable levels for all Alternatives so no differences exist in short and long-term timber harvest levels," pp. 4-109. There are contradictory statements on this issue throughout the document, for example, "The extent to which long-term soil productivity is affected by management activities is not precisely known because of the site variables involved and the limited investigations that have taken place," pp.4-10.
- Response:** The sustainability of timber volume production is estimated in the TRIM\*PLUS model based on the application of silvicultural systems and best management practices, which are designed to protect site productivity while being consistent with the objectives of each Alternative. While the risks to long-term site and ecosystem productivity inherent in different management options cannot be quantified, Chapter 4, pp. 4-107 and 4-108 in the Draft RMP, discusses the relative risks to site productivity of the silvicultural strategies used in the different Alternatives.
- Comment:** We disagree with the statement that vegetation management would unlikely result in the removal of a plant species from a significant portion of the planning area.
- Response:** Vegetation management has the objective of changing the relative abundance and dominance of plant species in order to meet management objectives, including objectives of maintaining species diversity. While such management may kill individual plants or may result in the replacement of an individual of one species with an individual of another species, such actions are designed to prevent reduction in rare species or the permanent extirpation of species from any landscape unit.
- Comment:** The time for matching supply of timber to a local market area is passed and in this era of global markets, BLM should consider combining its sustained yield units. A comparative analysis should be done that explores the effects of combining SYUs within the District.
- Response:** Sustained yield units (SYUs) were established under the authority of the O&C Act to "provide in so far as practicable, a permanent source of raw materials for the support of dependent communities and local industries." The act permitted sustained yield units to contain forestlands administered by other agencies or private lands. While these options remain legally possible, the purpose of the O&C Act relating to maintenance of local communities and industries continue to be legally and socially relevant. Combinations of BLM lands, or BLM lands and other lands, into other sustained yield units, were judged to be outside the scope of the RMPs.
- Comment:** Green tree retention objectives are overstated and have negative consequences to growth and yield which are out of balance with the value of such structures.
- Response:** Green tree retention is required by the President's Plan.
- Comment:** BLM suitability inventory (TPCC) suffers from a number of deficiencies including not segregating lands into strata related to the levels of silvicultural investment which can be supported by site quality and the reforestability of rocky land, or areas where good soils are covered by rock lag. Check marks for segregation of nonproductive lands should receive a field check.

## Appendix V

- Response:** The accuracy of the TPCC inventory was field checked as the inventory proceeded and in a separate step at its completion. The TPCC inventory was evaluated by an outside review group in 1989 and was found to be adequate. Reforestability assumptions for rocky lands were felt to be conservative by some of the reviewers. TPCC is an inventory of site potential and was not intended to include economic screens. BLM segregated economically marginal lands during the land use plan and did not include these lands in the timber allocation. No yield gain was assumed from fertilization on lower site lands, although fertilization of these lands may be accomplished to meet land use objectives and to restore stand vigor during the decade. Thinning of lower site stands is the key to the restoration of stand vigor on these lands to achieve volume production goals and structural and floristic objectives.
- Comment:** As time progresses hardwood forest products will be developed. As an example, madrone that was once slashed and burned or utilized for firewood, is now cut for very expensive hardwood flooring and as lumbers.
- Response:** Natural hardwood stands would be managed for production of commodities as markets become available. Regeneration with the same hardwood species mix would follow harvest. Management would ensure ecosystem sustainability and protection of other resource values. The market value of such products would be based on their highest and best use.
- Comment:** Many commercially important medicinal plants are found in BLM forest lands.
- Response:** While other plants undoubtedly exist, only one has been collected in amounts large enough to track. That plant is the Pacific Yew. From 1987-1991, 17,420 pounds of yew bark were collected. In 1992 and as of March 15, 1993, 119,843 pounds have been sold.
- Comment:** The BLM's Draft RMP/EIS has not disclosed the economic value of various species of mushrooms and how the BLM's proposed management practices could negatively impact what is becoming a significant commercial as well as recreational resource. Pursuant to NEPA, the Council of Environmental Quality (CEQ) regulations in 40 CFR, 1501.7, require that the BLM shall, "Determine the scope (1508.25) and the significant issues to be analyzed in depth...." The following information, readily available to BLM planners and decision makers, dictates that the BLM must disclose the environmental impacts of logging on mushroom populations and the economic impacts of logging on mushroom harvesting industry within the Environmental Impact Statement (EIS). This would also be consistent with BLM's stated desire to "aid and support... efforts to help... communities develop and implement alternative economic strategies as a partial substitute for their faltering timber based economies."
- Overall, the State of Oregon exported nearly \$60 million of mushrooms in 1991, including \$9 million worth of matsutake mushrooms according to Jerry Larson, International Trade Manager for the ODA.
- While these more fundamental ecological problems need to be addressed in relation to the health of world forest ecosystems, the immediate local economic prospects is that, due to the present abundance of Oregon's wild mushroom crop, the number of people working in this industry will continue to increase in response to the increased value of mushrooms, as dictated by increased world demand. The BLM's management plan needs to address and provide the necessary habitat to help accommodate this demand.
- Because small areas can provide significant mushroom habitat, the BLM must disclose to the public where suitable mushroom habitat exists in the District. Where habitat does exist, the EIS must describe the ecological and economic impacts on the proposed and continuing ground disturbing activities of logging and road building on mushrooms.
- Response:** The section of the Draft RMP dealing with Special Forest Products has been rewritten. Currently the only method of determining the magnitude of the legal mushroom harvest from BLM is by looking at what was sold under permit. From 1987-1991, eight permits were sold on the Medford

District for a total of 280 pounds. The permits sold for a total of \$140.00. In 1992 and as of March 15, 1993, 38 permits for 742 pounds of mushrooms were sold, value of permits was \$605.00. Objectives, management direction, and the effects of the Alternatives are described in the Special Forest Products section of the PRMP/FEIS.

- Comment: "TRIM\*PLUS has the capability to optimize investment levels." This capability was not used to analyze the economic efficiency of the range of Alternatives used. Why not?
- Response: The TRIM\*PLUS model has the capability to perform economic analysis of harvest options. Other than a requirement that all practices be economically practical, economic optimization was not a design criteria for any Alternative. Economic optimization did not emerge as a significant concern during scoping.
- Comment: The PA receives the largest ASQ increase from intensive practices with Alternative C, with D having the least. High levels of uncertainty exists for Alternative D and the PA, because of lack of research on planned partial cut prescriptions. There is a need for analysis of incremental economic efficiency of investments required for the PA. Uncertainty needs to be explicitly acknowledged in the decision calculus.
- Response: No yield increases for fertilization or genetic tree improvement were assumed for silvicultural systems or site characteristics for which scientific evidence, plot data, or modeling was judged to be inadequate to permit response estimation. Areas where responses were not considered include the southern GFMA, frost-prone environments, sensitive soils, and visual zones which retain higher levels of basal area in regeneration harvests. No fertilization response was assumed for site V lands.
- Comment: Records for each stand describe the species, site characteristics, acreage, history of activity, timber stand improvement needs, and opportunities. No mention is made of timber volume estimates, yet these estimates are necessary for each OI unit in order to build the representative 10-year scenario used for PSQ planning. How are these volume estimates derived and what is their reliability?
- Response: Stand by stand volume estimates were not required for development of the ten-year scenario. The ten-year scenario was not used in development of ASQ/PSQ, but was used in the impact assessment.
- Comment: In reviewing the computer modeling capabilities of the BLM relative to uneven-age management, we find that the current system is unable to track uneven-age stands. With this technological weakness it will be difficult for the BLM to properly track and monitor the uneven-age stands that will be the focus of the ecosystem management strategy.
- Response: See the section on monitoring.
- Comment: We question the reliability of plot data used in computer models. Only 40 plots were used for analysis. Plots on the Dead Indian Plateau were rejected because of the uniqueness of the area, but the model is used to project growth on the Dead Indian Plateau - this just doesn't make any logical sense. Because of the minimal reliability of computer modeling, we feel it is inappropriate to base the PSQ solely on computer models. We urge the BLM to adopt a more flexible PSQ defined as a possible range of sale quantity or defined by the number of acres treated per year, rather than a harvest amount. This will allow the BLM to find out what can be realistically expected with specific management practices and allow for meeting the goal and objectives for maintaining ecosystems and biological diversity.
- Response: Plot data from the Dead Indian Plateau was used in development of PSQ. For a discussion of modeling procedures and how inventory data was used, see the document, "Modeling the Future Condition and Yield of BLM Managed Forests," which is available at the Medford District BLM office.

## Appendix V

- Comment:** I don't understand that over the past decade the BLM was only able to accomplish approximately 46% of the intensive management practices called for in their existing plan. Yet, the Preferred Alternative makes the rather astounding assumption that you would be able to accomplish 36% more in the upcoming decade than they have in the past decade, even though major silvicultural techniques would be untested and untried in many cases.
- Response:** See Chapter 3 in this PRMP/FEIS for a discussion of the amount and kind of practices accomplished in the next decade. No silvicultural treatments are proposed that are different than treatments utilized over the previous decade, although underburning, pruning, and some other techniques have changed appreciably in quantity from the estimate of needs and the levels of accomplishment shown for the previous decade. Actual accomplishments are dependent on the receipt of funding.
- Comment:** Apparently between 1976 and 1988, you changed your definition of suitable commercial forestland. It should be explained how and why you did this. In each SYU the 200+ category fell drastically. Where did it go? Some may have been clearcut and reappeared in the three youngest age groups. Some may have been placed into a reserve of one kind or another. Was any harvested and then not found to be suitable commercial forestland?
- Response:** The number of acres classified as suitable commercial forestland was based on the TPCC inventory. See Appendix 3-T-1 for a discussion of the suitability inventory and Chapter 3, Timber Resources for a discussion of why the timber inventories for the two periods cannot be directly compared.
- Comment:** We suggest you include in Appendix 2-T-5, a description of the procedures used to compute the PSQ for the Preferred Alternative (and/or Proposed Action). We believe this is necessary in order to describe how the following components were handled in computing the PSQ: 1) retention of a portion of the stand at harvest, 2) development of stands with multiple canopy layers, 3) maintenance of wide tree spacing by means of a series of density management cuttings, 4) management of longer rotations, and 5) expected timber yields from stands so managed.
- Response:** For a discussion of these issues see the document, "Modeling the Future condition and Yield of BLM Managed Forests," which is available at the Medford District BLM office.
- Comment:** The State recommends that BLM's final plans set specific goals and objectives, including monitoring, detailing how management strategies of the Preferred Alternative will address forest health problems, and what mitigative measures will be implemented to improve unhealthy forest conditions on BLM lands.
- Response:** PRMP management objectives are detailed in Chapter 2. Stand level and general landscape level goals are detailed in the Silvicultural Appendix
- Comment:** Ecosystem based management and ecosystem restoration should consider the role Native Americans and other cultures have had in shaping vegetation patterns across the landscape.
- Response:** Ecosystem management, as described in this PRMP, recognizes the role of human cultures in shaping past and present landscapes. Historical information from literature, as well as from interviews, is an important part of the watershed analysis process. Watershed analyses form the base from which restoration and other management is done.

## Timber - Productivity/Sustainability/Forest Health

- Comment:** Set specific goals and objectives for forest health, detailing how proposed management strategies will address it, and what measures will be implemented to improve unhealthy forest conditions.

- Response:** Ecosystem (forest) health was defined by FEMAT as the state of an ecosystem in which processes and functions are adequate to maintain diversity of biotic communities commensurate with those initially found there. As such, the concept includes the condition and characteristics of stands and landscapes we considered under the topic of Biological Diversity and Ecological Health. General forest health, ecosystem diversity, and function goals were set as part of the PRMP. The result of application of these goals at the planning level and the extent to which the plan Alternatives will result in forests which are within the range of natural conditions is described in Chapter 4. Further analysis will occur in watershed analysis. See revised forest health section.
- Comment:** Assess forest health issues, particularly the role of salvage operations.
- Response:** See revised forest health section.
- Comment:** Failure to retain the large old insect resistant trees has been attributed to much of the forest health problems presently being experienced in the Northwest.
- Response:** Resistance to insects is a function of tree/forest vigor more often than size or age of individual trees. Vigorous low density widely spaced trees rarely succumb to insect problems. Overly dense stands that is beyond long-term site potential to support vegetation during drought periods, lowers vigor of trees. Insects, disease or fire thin out the most susceptible trees.
- Size of trees is a factor in resistance to natural disturbance regimes such as frequent fires that reduces forest density by killing trees with thin bark and/or foliage that provides fire-ladders. Older trees are insulated from such thermal intrusion and normally have elevated tree crown bases. Selective harvesting of older larger sized trees or removing older stand components has contributed to homogenous stands in fire prone areas, lowering overall stand fire resistance and thus patch survival following catastrophic events.
- Not permitting fire to play its traditional (natural) function has had a significant impact on both eastern and western Oregon. In fire-prone areas, removal of the large fire resistant trees has also contributed to problems in implementing underburning, to reduce density of brush/hardwoods/understories of conifers. In moderately to very dense stands, the recent drought cycle has placed some of the largest trees within these stands at risk, since they have not been able to compete successfully for limited soil moisture. Once weakened or killed by drought, they are readily attacked by insects.
- Comment:** Existing conditions of insects and diseases are not addressed or are superficially addressed, and quantitative data are not included. Little or no effort is made to project effects of new management practices on future insect and disease impacts.
- Response:** This is an emerging issue that was not identified during scoping of the plan. Consequently, previous inventories did not address such existing conditions. These concerns are part of the focus of ecosystem based management, but too little is known for us to forecast comparative outcomes. As we learn more, our management will adapt.
- Comment:** The plan indicates that a control method will be applied to insects and pathogens if large outbreaks develop. A prevention approach, never allowing outbreaks to develop, is preferable.
- Response:** A preventive approach is preferred for insect and pathogens, as well as dealing with competing vegetation and animal damage. Identifying ecosystem potentials, using density management and underburning, appear to be the preferred prevention/control method.
- Comment:** Forest health is not defined.



**Response:** Information on current insect and disease incidence has been included in Appendix S. Silvicultural treatments of individual stands will include consideration of stand vigor, insect and disease characteristics, and other stand and landscape conditions (see Silvicultural Appendix).

## Timber - PSQ

**Comment:** Include a discussion of the PSQ philosophy and identify whether the PSQ is a goal or a mandated level of timber production.

**Response:** Discussion has been added to Chapter 2, Timber section in this PRMP.

**Comment:** Clarify growth and yield assumptions.

**Response:** In addition to information published in the Analysis of the Management Situation which was developed before the RMP was prepared, information about growth and yield assumptions for the different alternatives were summarized in draft "Managed Stand Yield Tables" which were circulated for public comment. Work for the PA was summarized in a document titled "Modeling the Future Condition and Yield of BLM Managed Forests". Specific yields associated with intensive forest management practices are summarized in Appendix 2-T-7 and the effects of these practices on PSQ are shown in the sensitivity analyses in Appendix 4-I-1. The effects of practices on wood quality is summarized in Appendix 4-T-2.

**Comment:** The approach used for incorporating genetic improvement into the growth and yield models is inappropriate.

**Response:** Predicted genetic gains are based on individual tree growth differences in young progeny evaluation plantations. We recognize that it has not yet been demonstrated that these gains are achievable as per-unit-area yield gains at rotation. Field tests comparing performance of improved and unimproved stock continue to be established to verify the estimates. The Northwest Tree Improvement Cooperative, of which BLM is a member, has initiated a series of genetic gain trials to evaluate genetic gain on a yield-per-unit-area basis. In the meantime the results from progeny evaluation plantations are the best data we have. The effect on the calculated PSQ is negligible.

**Comment:** Adjustments to the yield models for genetics and fertilization are speculative.

**Response:** The short term changes in stand volume or tree size which occur in young stands as a result of forest fertilization are well documented in the research literature. Estimation of long term effects on yield are the result of extrapolation of growth trends in simulators such as ORGANON. Fertilization responses in ORGANON are consistent with other published estimates of growth response and are covered by a Ph.D thesis available at OSU or at the Medford BLM office. Since projections are based on considerable knowledge of tree and stand growth, these growth projections can be viewed with a reasonable level of confidence, although there is disagreement within the research community with some scientists feeling that responses are higher than those utilized in ORGANON.

**Comment:** Compare modeled, first-decade growth to historic, empiric growth.

**Response:** The inventory design utilized to estimate current standing volume does not permit the derivation of actual decadal volume growth in the forest. Growth of stands is projected in the TRIM-Plus model using empirical yield tables, approach to normality functions, partial-cut yield tables derived from ORGANON, and managed stand yield tables developed from ORGANON. Comparisons of projected growth with empirical data and research data occurs in the BLM paper, "Modeling the Future Condition and Yield of BLM Managed Forests," available at the Medford District BLM office. Long-term studies of the effects of intensive management on stand yield do

not exist in southwestern Oregon, south of Tiller, however, extrapolated yields are consistent with existing empirical data for the region and for northern California.

**Comment:** Compare the stands scheduled for treatment in decade 1 from the TRIM\*PLUS analysis and those stands scheduled in the operational plan for the first decade.

**Response:** The 10-year scenario is not an operational plan but a modeling tool that selects the quantity of stands with similar age and previous management attributes as those modeled in the TRIM\*PLUS harvest simulator.

**Comment:** It appears that PSQ is based on a linear model similar to FORPLAN.

**Response:** TRIM\*PLUS is a timber yield model similar in many ways to FORPLAN timber yields. Major advantages were that TRIM\*PLUS could be run on enhanced IBM/AT compatible microcomputers, and many runs could be made inexpensively and directly available for District personnel access, thus making runs adapted to local conditions and age classes. TRIM\*PLUS is a binary search model with the capability of structuring the forest in unlimited units based upon site, species, stocking levels and management prescription. Different minimum harvest ages can be used on component units.

FORPLAN in comparison, is a linear program optimization model requiring production coefficients for various resource values. It includes many more 'inputs' and addresses many 'outputs' in addition to timber yield.

**Comment:** Display a plot incorporating expected yield per acre at various rotation lengths multiplied by pond value per cubic foot. Include rotations up to 300 years.

**Response:** Appendix 4-T-2 deals with the effects of silvicultural practices, silvicultural systems and rotation lengths on wood quality and stumpage values. This has been revised for the final, incorporating improved economic analyses of practices. Pond value is projected through the TreeVal model interacting with ORGANON. The estimate of wood quality is considered inaccurate for rotations of longer than 100 years.

**Comment:** Short-term harvest limitations due to emerging concerns over threatened and endangered species, watershed protection, and the cumulative effects, may limit PSQ more than sustained yield constraints do.

**Response:** The interaction between PSQ calculation and our 10-year timber management scenario has permitted us to address cumulative watershed effects as well as is practical in a checkerboard ownership pattern where private actions are speculative. Ecosystem-based management is intended to minimize the need to add unforeseen restrictions on timber harvest due to listing of additional threatened and endangered species.

**Comment:** Use a model such as FORPLAN or SARA, or expansion of your 50-11-40 rule analysis model, to determine the potential harvest acreage by subarea and type in the first few decades of the plan.

**Response:** The 10-year scenario identifies potential harvest acreage, which can be determined by subarea, for the first decade. Extending the scenario into the future would lose reliability due to the adaptive nature of the plan.

**Comment:** Unites for only two lines of the Table on page 4-5 in the Draft RMP are named. What are the others? There's no ASQ. Isn't that a timber management activity?

**Response:** Table 4-I-1, "Estimated Annual First Decade Levels of timber management Activity by Alternative" has been updated to give units. With the exception of Road Construction (miles), all units for all activities are acres.

## Appendix V

- Comment:** There seems to be an error in the third paragraph of pp. 4-42, where northern was put in place of southern GFMA.
- Response:** The Draft RMP/EIS is correct as written.
- Comment:** I do not understand the Tables on pp. 4-36 and 4-37 in the Draft RMP.
- Response:** See text on page 4-35.
- Comment:** Figure S-2, pg. xix, lacks a title and the utility is unclear. The function of this graph without adequate title is unclear. It does not appear to match or to be a function of acreage listed in text in pp. 4 on page xvii.
- Response:** Figure S-2 represent functional old growth currently existing and estimated to exist at 10 and 100 years by major allocation under the preferred alternative.
- Comment:** There is a discrepancy between the statement on pp. 2-46, Alternative E, and Table 2-13 on pp. 2-95, regarding the intent to convert hardwood stands to conifer.
- Response:** Estimated hardwood volume from stand conversion under Alternative E is 0.05 million cubic feet.
- Comment:** On page 4-39, the second lines in both sections of the Table should be just like the first. If creating less old growth is moving away from the natural, then the early seral stages so created are also moving away, aren't they?
- Response:** The biological diversity section of the Proposed RMP/FEIS has been revised.
- Comment:** "The reduction of mature and old growth forest stages represents the most serious problem for wildlife in the planning area." The RNA feels strongly about the need to retain and enhance these more mature stages within the District. This will certainly not be accomplished through the use of even-age activities in these mature stands as prescribed in the preferred alternative.
- Vertical stand diversity is an important component to ensuring wildlife diversity. The Draft RMP preferred alternative recognizes that past even-age management activities on the District have failed to ensure the retention of vertical diversity and therefore calls for integrating "biological legacy" into the even-age management regime. However, the Draft RMP acknowledges "several cavity-using species do not readily nest or forage in isolated trees in the middle of clear cuts." Apparently, retaining 2-5 trees per acre is insufficient for ensuring the vertical diversity required to retain biological diversity in the forest.
- Response:** Two general management systems are proposed for matrix lands in the Medford District. On more mesic sites a "northern prescription" is proposed. On these sites an average of 6-8 conifers per acre plus snags and representative hardwoods would be left within harvest units. Retained trees would be grouped or distributed to meet resource objectives and still be operationally feasible. On more xeric sites, some in the Cave Junction area, a "southern prescription" is proposed. On these sites, 16 to 25 large green trees per acre plus snags and representative hardwoods would be retained. Harvest would be by individual tree selection or patch cut. Both prescriptions are expected to provide for structural (vertical) diversity over the course of stand development.

In a study done in the area, Cave Junction, Oregon, south to Branscomb, California', a comparison of stand age and species of birds and small mammals present was made. The study found that while stand age was a factor in the abundance of many species, stand age (seral stage) made no difference in the average number of species records.

<sup>1</sup>Ralph, John C., Peter W.C. Patton, and Cathy A. Taylor, 1991. "Habitat Association Patterns of Breeding Birds and Small Mammals in Douglas-fir/Hardwood Stands in Northwestern California and Southwestern Oregon," Wildlife and Vegetation of Unmanaged Douglas-fir Forests, USDA, Forest Service, PNW-GTR-285.

**Comment:** For Alternative D only, a data base model was used to ensure that the 50-11-40 requirement for spotted owls was met. We recommend that you expand this model to include other "cumulative effect" factors which may limit your harvest level in the coming decade. This model could calculate the allowable harvest acreage for each relevant subarea of the District for the coming decade(s) and be used in conjunction with the TRIM-Plus model. Alternatively, a short-term linear programming model (FORPLAN or SARA) could be used to determine the potential harvest acreage by subarea and type in the first few decades of the plan.

**Response:** On the Medford District, 50-11-40 objective for Alternative D were developed through ORGANON model yield tables and run in TRIM-PLUS. Forty percent crown closure was retained. A data base model was not used.

Acreage available for timber harvest in the next decade was reduced for "cumulative effects" reasons in the Draft RMP and Proposed RMP. Lands within deferred watersheds are unavailable in the first decade of the plan and are then metered into the available acres at the rate of 25 percent per decade. Lands within key watersheds are unavailable for harvest until watershed analyses can be done.

**Comment:** On page 3-37, doesn't this Table overstate early and mid-seral stages? Isn't much of those areas permanently in grass, brush, and scattered trees because of the dry climate and the soils? If the early seral stage is accurate, that would be an alarming amount of land.

**Response:** Seral stages are relevant to each major plant grouping. Early seral acres for the White oak-ponderosa pine/manzanita-wedgeleaf/grass grouping reflect the fact this community contains significant rangelands.

## Timber - Inventories

**Comment:** Update the starting timber inventory for PSQ calculation to October 1, 1993.

**Response:** For the PRMP/FEIS it was updated to October 1, 1992. Only slight change (increase) will have occurred in the following year.

**Comment:** Use data from the Forestry Intensified Research project, Oregon Department of Forestry and other studies to continue to validate the accuracy of forest inventory data and further evaluate lands currently determined to be unsuitable. If it can be determined that these lands can be managed for timber production, return them to the suitable base. Likewise, lands in the suitable base which are determined to be unsuitable through monitoring should be taken out of the base.

**Response:** Adaptive management, as discussed in the Use of the Completed Plan section of Chapter 2, provides for such adjustments.

**Comment:** Revisions in inventory procedures to monitor growth and yield are likely to be necessary.

**Response:** Revisions in inventory procedures are expected and are currently underway. As part of the adaptive management philosophy, monitoring is a critical function in the forest management plan and this include growth and yield. As the objectives of management by land-use allocation

become clearer, expected outcomes are projected, and multiple resource data needs are determined, the inventory systems will be delineated. Peer review is anticipated.

**Comment:** Volume equations and site index equations may be giving rise to biased estimates in the stand-ing inventory.

**Response:** A bias in estimation in small diameter trees is recognized. BLM volume equations had high volume levels in small diameter trees. The net effect on PSQ calculations dependent on older age classes was not considered worth correcting in the DEIS stage. Since the PRMP's probable sale quantity (PSQ) is less dependent on older age classes, adjustments have been made. These newer equations compare favorably with other estimates.

## Timber - Demand, Supply and Market Effects

**Comment:** Analysis of the timber supply situation is more optimistic than warranted. Portray additional scenarios reflecting lower potential harvests by other parties, as well as uncertainty of imple-menting proposed BLM sale levels.

**Response:** The Timber Supply Analysis has been revised for the PRMP/FEIS. The analysis now reflects implementation of the President's Forest Plan on the National Forests, and includes updated private land timber harvest information consistent with the analysis in the final SEIS. Each BLM alternative is analyzed in this updated regional timber supply setting. The result is lower regional timber supply for all alternatives than shown in the draft RMP.

## Energy and Mineral Resources

**Comment:** Identify State-owned mineral rights and acknowledge non-impact of the plan on those and other existing valid rights.

**Response:** BLM has no record of the owners of non-Federal mineral rights. The acknowledgement has been added.

**Comment:** A mineral inventory should be conducted before withdrawals are recommended.

**Response:** The withdrawal proposals in the PRMP are based on the sensitivity of other resources to signifi-cant damage from mineral exploration and/or development activities as they would be antici-pated to occur under present laws and regulations. The formal recommendation to the Secretary of the Interior for withdrawal will be accompanied by a mineral potential report to support a fully informed decision.

**Comment:** The Appendix showing locatable mineral management requirements shows only standard requirements under 43 CFR 3809. Additional restrictions in management areas such as ACECs, Wild and Scenic Rivers, VRM Class II areas, and Special Status Species habitat should also be shown.

**Response:** Such restrictions will be broadly identified on the mineral management restriction maps for the proposed PRMP (that will be developed for the Record of Decision). The effects of such restric-tions are site-specific and mining-plan specific, and cannot be known without a specific proposal to analyze.

**Comment:** Categorizing as low potential, all areas where there is insufficient information to determine mineral potential, is inappropriate.



- Response: The relevant column header in the Chapter 3 Tables has been revised to reflect that the identified acres are a combination of low and unknown potential.
- Comment: The Draft RMP states that there will not be any new large scale mining in the next ten years. What about the potential of a large mine on \$8 dollar mountain?
- Response: The Appendix 4-EM-1, Mineral Reasonably Foreseeable Development Scenarios, has been modified to include a section on nickel laterites.
- Comment: Clarification is needed regarding what the normal requirements are for operating under a notice, and how activities that are done under an approved plan of operation differ from notice level actions.
- Response: The Appendix 2-EM-2, Locatable Minerals Surface Management, has been expanded to address the differences between the three levels of mining activities as defined in the regulations 43 CFR 3809, 1-2, 1-3, and 1-4.
- Comment: There are discrepancies in the mineral potential acreage totals.
- Response: The acreage totals have been corrected to be consistent with total surface and subsurface mineral estate.
- Comment: We also note that the mineral potential map has several drawn boundaries within the moderate mineral potential shading, which serve no identifiable purpose.
- Response: Each polygon has been identified on a data base for various other data elements. Each area of moderate potential may have different mineral types (i.e., limestone, tungsten, or gold). The separate polygons are usually based on different commodities.
- Comment: Why are the additional areas, with known histories of mineral activity not classified as having high potential?
- Response: The mineral potential analysis is based on BLM manual 3031. Known histories of mineral activity is not one of the criteria for rating mineral potential. A high rating is based on known mines or deposits which would mean active mines, recent action mines, or known resources. Old historical mines are typically mined out and their presence may only suggest some potential for other similar deposits in the same geologic environment. It is for that reason that areas of historical mining were rated as moderate.
- Comment: Comments on Appendix 2-EM-2 ranged from occupancy, firewood, sewage permits, pets, gates, and work period requirements. The general opinions were that the Draft RMP Appendix was illegal or too restrictive.
- Response: The entire Appendix has been revised based on many of these comments.
- Comment: Add and/or revise paragraphs to include heap leach mining, with regard to protection of natural assets, operation, reclamation, and etc.
- Response: We have expanded this section to include site-specific guidelines for larger mine operations requiring a plan of operation.
- Comment: Add a paragraph for reclamation of drill pads, sumps, and roads.
- Response: Please refer to Appendix 2-EM-1, Standard Leasing Stipulations. Lessee shall take reasonable measures deemed necessary by lessor to accomplish the intent of this section. To the extent consistent with lease rights granted, such measures may include but are not limited to, modifica-

tion siting, or design of facilities, timing of operations, and specifications of interim and final reclamation measures.

**Comment:** What regulations and guidelines apply to larger dredges? Also state what restrictions apply to dredging during fish runs, and for spawning bed protection.

**Response:** The regulations are the same, whether 4" or larger suction dredges. The State of Oregon Department of Fish and Wildlife restrict dredging timing. (see Appendix N).

**Comment:** While BLM strategies for different activities may have much in common, they do have to be carefully tailored in consultation with the affected industry, due to the statutes and technical constraints unique to each. This is not to argue that certain bottom-line environmental conditions should not have to be met by miners, just that a different set of constraints needs to be imposed on mineral activities to achieve the desired result.

**Response:** The BMP strategy for mining was prepared specifically for mining, taking into consideration mining statutes and regulations. The BMPs developed for timber harvest activities were not applied intact to all classes of mine operations.

**Comment:** Recognize that mining in ACECs and RNAs is an outrageously incompatible activity.

**Response:** The Proposed RMP recommends withdrawing all RNAs from entry under the mining laws. One purpose of an ACEC designation is, to provide special management protection for special areas, without formal withdrawal.

**Comment:** Suction dredging may occur outside of the preferred working season with a waiver from Fish and Wildlife. The Oregon guidelines for timing in-water work to protect fish and wildlife resources are just that, guidelines, not law or cast in stone.

**Response:** Oregon guidelines for timing in-water work to protect fish and wildlife resources are no longer guidelines. Revision to the State Permit #0700-J, for suction dredges, has changed to a "required waiver," if operating outside the "permitted work period."

**Comment:** Grading all disturbed lands to a near natural contour is unrealistic and may preclude mining.

**Response:** Operating in VRM Class II designated lands requires, "disturbed lands be graded to near natural contours where practical and revegetated with native plants."

**Comment:** Since when is it BLM's responsibility to enforce State rules and regulations? By requiring prior State approval of Operations, BLM is taking on the legal responsibility of all State rules and regulations.

**Response:** The surface management regulations in 43 CFR 3809.2-2, require all operations on Federal lands to comply with Federal and State laws. Further, 3809.3-1(c) provides, "the Director may enter into agreements to provide for a joint Federal/State program for administration and enforcement." The BLM Districts will not be enforcing State laws, but we may require compliance with the State laws.

**Comment:** Bonding is already handled by the State. Why do you feel the need to get into this?

**Response:** The BLM has revised its bonding requirements. BLM can require additional bonding if we believe that the State bonds are inadequate.

**Comment:** I propose that a 5" dredge be allowed on the Rogue River from the Applegate to the mouth of Grave Creek.

- Response: The bed and banks of the Rogue River upstream from Grave Creek to the Applegate are State-owned lands because that portion of the River has been determined to be navigable at the date of statehood. The State of Oregon currently limits the size of dredges in scenic waterways to 4".
- Comment: Restrict mining in all threatened or endangered fish runs until run viability is established.
- Response: We do not know of any officially threatened or designated endangered fish runs in the planning area. The NMFS must first determine there are threatened and endangered fish runs.
- Comment: No mining operations using toxic solutions where they could enter the groundwater systems should be allowed anywhere on public lands.
- Response: All mining operations using toxic chemicals are required to obtain permits from the Oregon State Department of Environmental Quality (DEQ). No mining will be authorized without DEQ's guarantee of adequate groundwater protection.
- Comment: On page 2-22 of Volume I, in the Draft RMP/EIS, is a call for withdrawal from mineral entry of the Galice Creek area, to provide recreational opportunities, and establish an interpretive historical display. Again, at the very least, it must be clarified that all existing claims are not subject to such a withdrawal or validity challenges (absent an application for surface patent), and that access rights will not be abridged. We urge the BLM to work closely with the local mining district and Associations so that such a withdrawal can be accomplished without creating an adverse situation.
- Response: It is a well established principle, that all mining claims existing prior to the date of withdrawal shall be recognized, and that the withdrawal is subject to those valid existing rights. It is not the intention of the proposed withdrawal to invalidate existing claims, or to acquire through condemnation the existing rights or structures. However, in the event claims are abandoned or otherwise declared null and void, new claims would not be allowed, since there would be withdrawal from mineral entry.

## **Livestock Grazing**

- Comment: Livestock grazing should be eliminated from all riparian areas
- Response: Problems associated with livestock grazing in riparian areas are usually the result of timing and duration of use. Where conflicts with riparian areas have been identified, the livestock grazing authorization may be modified, fencing may be constructed, or grazing eliminated.
- Comment: Inventories and management decisions pertaining to grazing management are incomplete or lacking in the RMP. Grazing issues, projects and their impacts are not addressed in the RMP.
- Response: Livestock management goals, objectives, proposed projects, and related data are addressed in the Medford District Grazing EIS, completed in 1984. The grazing EIS is tiered to this PRMP, and therefore by reference a part of this PRMP.
- Comment: The Management Direction Common to All Alternatives incorrectly states that, "there are no environmental consequences from grazing."
- Response: The "no environmental consequences" statement refers to the two issues addressed in the RMP, clarification of initial stocking and activation of nonuse, not to grazing in general.
- Comment: Grazing fees must reflect resource damage costs.

## Appendix V

- Response:** Grazing fees are established by the Secretaries of the Department of Agriculture and Department of the Interior using a formula set by Executive Order (12548) which is based on the Forage Value Index, the Beef Cattle Price Index, and the Prices Paid Index. Currently, new legislation has been introduced that proposed to adjust these fees to better reflect fair market value.
- Comment:** Restoration and rehabilitation efforts should emphasize the use of native species.
- Response:** The Bureau has recently become more sensitive to the use of native species for rehabilitation efforts. In future years, native species would be considered the species of choice in many applications. In past years, seed availability and cost have eliminated the use of native species in some applications. Introduced species may still be used in situations to meet specific goals.
- Comment:** Cattle should be eliminated from recreation areas.
- Response:** Livestock grazing is one of the many acceptable uses of our public lands. Where conflicts occur, the BLM works closely with livestock operators to reduce these impacts. If the conflicts cannot be resolved it may be necessary to fence the recreation site or eliminate livestock in some instances.

## Land Tenure

- Comment:** Coordinate with adjoining Districts regarding land tenure decisions.
- Response:** This coordination has been accomplished.
- Comment:** State BLM's responsibility to accommodate the State's 5,202.29 acres of in lieu land entitlement with public domain land.
- Response:** This has been added to Chapter 3, Land Tenure.
- Comment:** The geographic information system (GIS) used by BLM should also be used to identify areas of non-Federal land that, if acquired by the federal government, will facilitate ecosystem management.
- Response:** BLM's GIS for western Oregon includes only limited resource data (hydrography) on the intermingled lands. Acquiring the data necessary to explore such a question comprehensively would cost millions of dollars and take several years.
- Comment:** If land should be considered for disposal, the Confederated Tribes should have the opportunity to acquire it, either by transfer to the BIA or other means.
- Response:** Current legislative authority makes no provision for such a preference for Indian tribes. Most lands considered for disposal would only be exchanged for other lands, however.
- Comment:** Acknowledge existing or potential State ownership claims on navigable waterways.
- Response:** This has been added to Chapter 3.
- Comment:** The issue of land tenure adjustment should be explored in a separate planning document to allow for greater public participation.
- Response:** Only lands that meet disposal criteria have been identified. The public will have an opportunity to participate when specific proposals are identified. The public has had an opportunity to participate through the development of this PRMP.

- Comment: Consider an exchange program to consolidate public and private land ownership patterns. Do not acquire private land through purchase nor dispose of public land through sale.
- Response: Exchanges are a major component of ecosystem based management and provide for consolidation of ownership patterns and acquisition of lands with important ecosystem resource values. Land exchanges will be the first priority for acquisition and disposal of public lands. Exchanges will be completed only after a determination is made that the public interest will be well served and the resource values to be disposed of are not more than the resource values to be acquired. Only Zone 3 lands meet preliminary criteria for disposal through sale.
- Comment: Reserve the right to comment directly on any proposed acquisitions or exchanges, generally oppose land acquisitions that would reduce the counties tax base, and oppose any exchange of O&C land unless the acquired lands retain O&C status.
- Response: Recently published exchange regulations require that State and local governments be notified of any exchange at the time an agreement to initiate an exchange is signed, they then have 45 days to comment. Section 5 of Public Law 99-632 provides that lands acquired in exchange for O&C lands shall be considered for all purposes to be O&C lands.
- Comment: BLM should try to acquire the Medco ponds and Medco lands along Big Butte Creek.
- Response: Should Medite (Medco) express an interest in disposing of the lands, BLM would look at the feasibility of acquiring them through an exchange.
- Comment: Lands identified as tenure Zones 2 and 3 contain resource values that should not be disposed of.
- Response: Lands in Zones 2 and 3 only meet the criteria for disposal by exchange or sale. Prior to disposal through exchange, a determination must be made that the public interest will be well served, and resource values to be disposed of are not more than the resource values to be acquired. Sale of land would normally be parcels of limited or no public value.
- Comment: Public lands intermingled with home-sites in the Applegate Valley should have a high priority for disposal through exchange.
- Response: The Bureau will consider any exchange that is in the public interest. Priorities will be determined by the relative value of areas or resources to be acquired and the availability of funding to process exchanges.

## **Access**

- Comment: Identify how much access BLM provides to intermingled landowners through agreements and easements.
- Response: Some 75 percent of intermingled forest land has rights of access for forest management purposes, under the terms of agreements and easements with BLM.
- Comment: Policy and best management practices guidance should be developed for administering road easements and copies should be provided to all affected land owners.
- Response: Best management practices and road management objectives have been developed for all roads controlled by BLM without regard to ownership of the underlying land. These documents are available for review at the Medford District BLM Office.



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- Comment:** The Draft RMP does not address rights held by private parties to construct roads across BLM-administered lands under terms of existing reciprocal right-of-way agreements. What is the magnitude of the problem and how will future cases be handled?
- Response:** Existing reciprocal right-of-way agreements cover approximately 80 percent of the public lands in the Medford District. Existing agreements contain four conditions for objecting to new construction. These are: 1) proposed road does not constitute the most reasonable direct route for removal of forest products, 2) the proposed road will substantially interfere with existing facilities or improvements on lands of the landowner, 3) the proposed construction would result in excessive erosion, and 4) an existing road is available and suitable for the removal of timber.
- Major road building activities authorized by the reciprocal agreements has declined significantly as major components of the transportation system has been completed and the private timber has been harvested. Roads presently being constructed primarily are short spurs off of existing roads. Prior to any construction activities on public land, BLM or the private party must make a "may affect" determination. If the proposal may affect a threatened species, consultation with the Fish and Wildlife Service is required by Sections 7 or 10 of the Endangered Species Act. No construction may take place until all requirements of the ESA are met.

## Roads

- Comment:** Develop a comprehensive road management plan.
- Response:** Such plans will follow completion of the PRMP. Transportation management objectives will be developed for all roads.
- Comment:** Coordinate with adjacent landowners and others in the development and implementation of a comprehensive road management program.
- Response:** We recognize the importance of coordination with intermingled landowners and other road users. Reciprocal right-of-way agreements require coordination with the intermingled landowners and road users that are parties to them.
- Comment:** Outline how BLM will cooperate with other landowners to build the permanent road system and accomplish road management objectives.
- Response:** Most of the permanent road system already exists. Cooperation with other landowners is an integral part of road development planning and the development of transportation management objectives.
- Comment:** Clarify how administrative road closure and obliterating them relate to specific issues and objectives. Address maintenance of roads administratively closed. Also address road maintenance priorities if funding is not adequate.
- Response:** Road closures are driven by issues and objectives for protection of other resources, such as wildlife. If roads are to be retained for future management but closed to public use, most closure would be accomplished by gates, allowing access for maintenance. Transportation management objectives in transportation management plans will address maintenance priorities.
- Comment:** Explain how the proposed road density objective will be achieved in light of the contention that partial cut systems often require greater road densities than clear-cut systems.
- Response:** Some additional roads will be temporary and will be revegetated. Some existing local and collector roads will also be closed to help meet this objective and use of aerial logging systems will increase.

- Comment: Develop a methodology for prioritizing those roads BLM is planning to build, as well as for prioritizing road closure and restoration.
- Response: Transportation management objectives will address such prioritization.
- Comment: BLM should aggressively pursue funding for its road management plan.
- Response: BLM includes requests for funding for road management in its annual work plan.
- Comment: The State recommends a maximum density of 1.5 miles of open road for sensitive watersheds and sensitive wildlife areas. A reasonable reduction in open road density is recommended.
- Response: The proposed transportation management plan will address the issue of road density in sensitive areas. Actual roads to be closed would be identified. Many miles of the existing road system are naturally closed and in fact, restored by native regrowth but have not been inventoried as such. The proposed plan would identify those as closed roads.
- Comment: The existing transportation plan needs to be redesigned to prevent serious cumulative impacts to water quality, fish habitat, and other resources.
- Response: A new transportation plan will be developed to include resource objectives and cumulative impacts to all resources.
- Comment: Unneeded, abandoned, and poorly maintained roads must be identified and scheduled for maintenance or obliteration.
- Response: The proposed transportation management plan will use an interdisciplinary team approach to identify priority roads to be eliminated or obliterated on a watershed basis.
- Comment: The BLM transportation management plan needs to address the State of Oregon's recommendation for limiting rural interface areas.
- Response: The proposed transportation management plan will consider all recommendations.
- Comment: Avoid fragile soils during the road planning process.
- Response: All recommendations will be considered. Where recommendations cannot be followed, every effort will be made to mitigate the impacts on soil and water quality through the use of road surfacing and other erosion controlling measures.
- Comment: Considering the impacts, how can BLM build 440 miles of new road during the next decade? Need map showing proposed roads.
- Response: The road construction mileage for the next decade is an estimate based upon a scenario of timber sales. Until actual timber sale plans are developed no actual location or accurate mileage estimate for roads will be known. Road construction considered under the proposed plan will be less than that considered under the PA for the Draft RMP.
- Comment: Timber sale levels are proposed to drop 50 percent. Why is road construction only being reduced 25 percent?
- Response: Actual road construction miles needed to service any timber sale is not determined by the volume of the sale. The ownership pattern and areas available for timber harvesting may be such that more miles would be required to reach a remote parcel. BLM will construct the minimum mileage necessary consistent with good economics and minimal environmental impacts. Other means of access will also be considered.

## Appendix V

- Comment:** Road building has a significant impact on many resources, yet it is not treated as an issue in the RMP/EIS and is put under Management Direction Common to All.
- Response:** Road building is addressed under each resource that it impacts. All impacts are also discussed under that specific resource. The use of Management Direction Common to All is the preliminary method to attach road impacts to all alternatives without restating the same language under each alternative.
- Comment:** BLM should not be responsible for building roads for access to timber harvest areas.
- Response:** Road construction is required to harvest many timber areas. BLM must manage and provide for protection of the land and its resources. BLM locates, designs, and sets requirements for road construction to protect those resources.
- Comment:** Need map to show BLM roads in the PRMP/FEIS document.
- Response:** The existing Medford District transportation map covers a large area. The scale of the map precludes it being reproduced and placed in the document because it would not have sufficient detail to be useful. These maps are available at the Medford District BLM Office.
- Comment:** Road use agreements should continue to receive priority attention.
- Response:** Cooperative road agreements are a permanent part of the BLM transportation system. They will continue to be used to reduce duplicate road systems and facilitate effective maintenance.
- Comment:** Roads should be open to access public lands. Request Oregon Fish and Game to come up with a better wildlife closure system that rotates closure areas.
- Response:** Arterial and major collector roads would be left open in most areas under the proposed transportation management plan. Easements would be acquired for public access on major routes. Precise closures would be determined based upon resource management objectives by an interdisciplinary team representing each resource.

## Fire

- Comment:** Consider letting naturally caused fires burn, while protecting life and property.
- Response:** Most naturally caused fires in the District occur during times when the fire risk (thus, danger to life and property) is high. Among the "property" at stake are timber and residences on intermingled private land. Therefore, it would rarely be appropriate to let a fire burn, except where prescribed fire and vegetation management objectives would be met.

## Socioeconomic Conditions

- Comment:** Assess the forest-wide economic efficiency of the new plans.
- Response:** Assessing such efficiency would require placing dollar values on a variety of ecosystem management benefits which we do not believe can be effectively quantified on an equal economic standard with commercial product (e.g., timber) benefits. Ecosystem considerations are more appropriately assessed on their qualitative merits.
- Comment:** Assess the economic efficiency of stand management prescriptions, including a comprehensive look at wood quality and value.

- Response: Since stand management prescriptions are driven substantially by ecosystem management concerns, we do not consider economic efficiency analysis relevant. Wood quality and value is discussed in Appendix BB.
- Comment: Update economic data to reflect more current information.
- Response: Additional and more recent employment, personal income, and county revenue information has been added to the final EIS. Although the official baseline (1984-1988) remains unchanged, the added information allows absolute and relative comparison of the alternatives and their impacts.
- Comment: The BLM should include an analysis of statewide impacts of the Alternatives and proposed action in the PRMP/FEIS.
- Response: An additional layer of analysis has been added to analyze the western Oregon impacts of BLM alternatives and the PRMP.
- Comment: BLM has not considered the impacts of Measure 5 in its' planning process.
- Response: A discussion of Ballot Measure 5 and the constraints it places on local government revenues has been added. This discussion recognizes that ballot Measure 5 is part of the economic environment in which BLM decisions are made.
- Comment: Consider compensating adversely impacted citizens, maintaining/increasing county revenues, and provision of social and economic development programs that tap the spirit of rural people, to mitigate social and economic impacts.
- Response: The BLM has neither the authority nor ability to provide compensation, social services, or other economic assistance to impacted counties, businesses, or individuals. Such proposals are beyond the scope of the PRMP, but are addressed in Chapter 7 of the FEMAT report, and the Economic and Community Mitigation discussion in Chapters 3 and 4 of the SEIS.
- Comment: Since 1953 the O&C counties have relinquished one third of their statutory entitlement. These foregone county monies were "invested" by the counties with the expectation they would receive a "return" on their investment through increased harvest levels in future decades. Nearly one billion of otherwise county revenue has been so appropriated since 1953.
- Response: The 25 percent plowback by the O&C counties between 1953 and 1981 was used to increase management intensity of the O&C lands. Although many expenditures, such as road building and reforestation were made with additional future use and harvest in mind, these activities also enabled immediate access to and harvest of timber otherwise inaccessible. This resulted in increasing levels of sustainable harvest being identified throughout this period, as well as increasing timber receipt collections.
- Comment: BLM should "support/endorse" Federal and State loans and grants to encourage local businesses to invest in the equipment for milling smaller logs.
- Response: Discussion of potential legislative agendas is beyond the scope of the PRMP/FEIS.
- Comment: Re-evaluate the impacts to total employment of harvest reductions.
- Response: Different models representing different employment and income multipliers were used to assess BLM and cumulative impacts. Although this appears inconsistent, we felt the different type of analysis conducted required the use of different models, thus multipliers. The analysis of BLM actions was conducted as a marginal analysis, examining only the actions of BLM. For these analyses BLMPACT was used. The western Oregon cumulative effects analysis examined BLM actions together with assumed management actions of the USFS, State and private forests. For this analysis the subregion multipliers cited in the SEIS were used. Unlike the multipliers used in

the DRMP/EIS these multipliers only examine impacts within the timber industry, including self-employment.

**Comment:** An alternative which emphasized recreation opportunities could have served as a benchmark from which to compare jobs gained from the various Alternatives presented in the plans.

**Response:** Using information available in Hospodarsky (1989) the BLM projected future recreation demands (year 2000) expected on BLM-administered lands. This identified demand was assumed to represent the maximum recreation potential of these lands. No alternative was developed specifically to address meeting the maximum recreation potential of BLM-administered lands. However, based on the expected provision of recreation opportunities under each alternative, we determined what level of potential demand could be met. See Table , Anticipated Short-Term Capability of BLM Administered Facilities and Resources to Meet Projected Recreational Demand for 11 Major Use Categories by alternative. Designing and analyzing specific plan Alternatives merely to provide benchmarks for comparative analysis would make the PRMP/FEIS unwieldy.

**Comment:** Provide the analytical ground work for an effective policy response to the fundamental social and economic changes that would follow the implementation of the preferred alternative.

**Response:** This is outside the reach of BLM's statutory mission and beyond the scope of the PRMP/FEIS. Chapter 4 of the SEIS has addressed this, however, in its Economic and Community Assistance Program discussion

**Comment:** Promote restorative work for ex-loggers.

**Response:** Labor intensive management activities, including restorative work, that have been incorporated into the PRMP, will if funded provide additional employment opportunities in the local economy. The level of employment identified cannot fully replace employment losses caused by reduced harvest levels. In addition, BLM has no authority to assure that those employed in such work are ex-loggers or former workers of a specific industry.

**Comment:** BLM has failed to identify viable mitigation measures for the "very real and severe" social and economic impacts associated with the Alternatives.

**Response:** Identification and implementation of social and economic mitigation measures is beyond the scope of the PRMP/FEIS. The BLM has neither the authority or ability to provide social services or economic assistance to impacted individuals.

**Comment:** BLM has not examined the national and international impacts of reduced lumber and wood products production in the Pacific Northwest. Identified areas of impact include: economic & environmental impacts of using substitute building materials, housing cost impacts, changing import/export flows (especially from developing countries), and economic and environmental impacts of harvesting timber elsewhere in the world.

**Response:** A generalized discussion of the national and international impacts of using substitute building materials and fiber sources has been added using information from recent publications. These studies examine the range of resource substitution impacts individually. The extent and rate at which these effects will combine in response to reduce Pacific Northwest timber harvests is unknown.

**Comment:** Add export base analysis.

**Response:** Attempting to do an export base analysis for western Oregon communities would entail making substantial assumptions about the "export" content of incomes in many sectors of the economy of each community. The results would not contribute substantial new knowledge about which communities are sensitive to "export" markets. Sensitivity of communities to changes in "exports"



has been identified through numerous sources including: (1) Oregon Legislature, Joint Legislative Committee on Land Uses', "Dependent Communities Desktop Analysis (1990)," and Oregon Economic Development Departments', "Oregon's Coordinated Timber Response Program (Updated 1993)."

**Comment:** BLM failed to identify the importance of changes in the natural environment and amenity values (scenic beauty, clean water and air, recreation resources) in attracting businesses and retirees to western Oregon.

**Response:** Those changes would be long-term, not within the 10-year time frame of our socioeconomic analysis. Additional discussion has been added, however, to Chapter 4, Socioeconomic Conditions. Quantitative analysis and comparisons were not made for these amenity values.

**Comment:** An economic analysis of the benefits and costs of a "Holistic Natural Watershed Management Plan" alternative, compared to the Alternatives, should be made. Include greatly increased commercial and sport fishery benefits.

**Response:** The SEIS addressed such an alternative in its Alternative 1. The comparative economic benefits of such an alternative would occur many decades in the future. Full recovery of fish habitat, for example, is not expected for 200 years under any alternative. The cost of heavily protective alternatives, however, in lost revenues, employment and local income, would be immediate. Economic analysis, with traditional discount rates for future benefits, would attach little current value to any such long-term benefits.

**Comment:** Identify other forest industries which are becoming significant contributors to the local economy, such as special forest products. Identify industry potential.

**Response:** The types and value of special forest products sold from BLM-administered lands have been identified. See Chapter 3. The economic impacts of these sales have not been examined due to lack of information on which to base estimates or projections of employment and personal income.

**Comment:** Projected high stumpage prices (are unlikely to persist), or (will increase substantially more).

**Response:** As shown in Appendix T, projected future prices are lower than current prices. Upon implementation of the PRMP and the assumed resumption of timber sales on the National forests, prices are expected to decline from the high levels associated with the current Federal timber supply crisis. Less Federal timber will be available in the future compared to the 1984-1988 baseline period, thus higher prices can reasonably be expected.

**Comment:** Use appropriate models to measure social impacts and systematically analyze them.

**Response:** No models were used to measure or analyze social impacts in the PRMP/FEIS. However, several recent publications, not available at the time of the Draft, were used to enhance the discussion to social impacts. These publications generally relied on surveys, focus groups, and interviews to assess impacts. No models were developed or used.

**Comment:** Add demographic and occupational profiles of communities.

**Response:** This type of data is not readily available for all communities potentially impacted by BLM management alternatives. A profile of "at risk" communities was developed by the FEMAT and is discussed. This profile contains demographic, occupational, and other characteristics.

**Comment:** Add an occupational profile of displaced workers.

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- Response:** This information was provided by the Oregon Employment Division. Because of the wealth of information and length of the report only a few points could be highlighted in our PRMP/FEIS. A full reference was provided for those wishing to request the information from the Oregon Employment Division.
- Comment:** Describe the linkage and dependency (social, economic, spiritual) of local and regional communities, groups, industries, etc. on ecosystems within each land allocation.
- Response:** Social and economic analyses were conducted for each alternative, representing a complete set of allocations. Individual allocations were not examined. Spiritual dependency and linkages to BLM-administered lands are, with the exception of traditional tribal use areas, individual in nature. The PRMP/FEIS was unable to comprehensively address these linkages to ecosystems due to the lack of information.
- Comment:** Disclose the economic impacts of ground-disturbing activities on the mushroom harvesting industry.
- Response:** Although qualitative information regarding the ecological impacts of ground disturbing activities exists for most plant species (see revised Chapter 4, Vegetation), quantitative information for many is not available. The economic impacts of ground disturbing activities for any given mushroom species could only be defined on a site and time-specific basis. Therefore, it is not possible to identify any general economic impacts at this time.
- Comment:** The Draft RMP, pp. 12 and pg. 3-121: states "social and economic impacts could be expected if BLM plans were to have an adverse impact on local economies." Apparent tight relationship between job losses and reductions in BLM timber production needs to be greatly qualified and associated with significant uncertainty.
- Response:** The District analysis directly ties BLM commodity use levels to specific levels of employment and personal income using a linear relationship. This is a product of the input-output model used.
- The qualifying statement cited was added to recognize the range of Alternatives examined in the DRMP/EIS. Not all Alternatives impact the levels of BLM dependent personal income and employment.
- Uncertainty regarding the future of local economies does exist due to a variety of factors. Some of these factors, although beyond the scope of BLM's control, have been identified in the DRMP/EIS document.
- Comment:** In the future Congress should substitute some form of "in lieu" compensation for the exemption of public land ownership from local taxation.
- Response:** Discussion of potential legislative agendas is beyond the scope of the PRMP/FEIS documents.
- Comment:** The Economic Contribution section of the Draft RMP document would be enhanced considerably if it included the best estimate of value associated with fisheries.
- Response:** This estimate has been added to Chapter 3 in this PRMP. No change is expected in the short-term analysis period for economics under any alternative.
- Comment:** Under all Alternatives in the 2001-2010 time period, total harvest would increase even though BLM and USFS would not. These are important findings and should be included up front to lessen the public propensity to directly equate reductions in BLM's PSQ to job and income losses.

**Response:** These important findings are part of BLM's cumulative analysis. The harvest increases identified in 2001-2010 are derived primarily from private supply sources. This information was included to show the interaction of supply, demand, price, and the relative influence of BLM timber supply on these factors.

The marginal analysis, which directly links BLM harvest to employment and income, identifies dependent personal income and employment associated with varying levels of BLM commodity uses. These levels were determined independently from identified actions on private and other Federal lands.

**Comment:** The use of present net value (PNV) as a timber management tool should not be used in our public forests. It puts too much emphasis on short rotation tree farming at the expense of maintaining a true forest.

**Response:** We believe that treating time as though it were costless would be improper. The effect of foregoing opportunities for society now, in order to obtain increased opportunities for society in the future, is the reason why there is much controversy over natural resource management. Public officials cannot ignore these costs.

**Comment:** Any accurate estimate of socioeconomic impact needs to take the supply/demand/price relationship into consideration.

**Response:** The relationship between supply/demand/price were examined in the Timber Supply Analysis for BLM planning (see Appendix T, in the PRMP/FEIS). The resulting price projections were incorporated into the analysis of employment, personal income, and county revenues. Through this analysis, we believe the interaction of supply, demand, and price were adequately incorporated.

**Comment:** The social and economic impacts of reduced BLM harvest levels in combination with other Federal agency actions is not adequately addressed.

**Response:** The BLM has examined the cumulative impacts to timber supply (see Appendix T, in the PRMP/FEIS). In this analysis, BLM assumed the Forest Service would offer timber sales at the level identified in the USDA Forest Service Spotted Owl FEIS/ROD (March 1992). Using the resulting total supply levels, an assessment of overall dependent personal income and employment was conducted (see Table 4-SE-3, Estimated Personal Income and Employment Dependent on Timber Harvest from All Sources, Western Oregon).

**Comment:** The BLM resource management plan only mentions in an obligatory way, the devastating effects that implementation of the preferred alternative (PA) would have on the economies of Jackson and Josephine counties, not to mention the people.

**Response:** The social and economic impact section has been revised. Display of employment and personal income impacts has been changed to display direct and secondary impacts by discrete economic sectors. Although the analysis is not new, we feel this revision better displays the economic impacts. Additional text has been added to discuss social impacts.

**Comment:** Recreation related spending by local residents within the local economy was assumed to be a fixed portion of consumer spending. BLM recreation was also assumed to substitute for other amusement/recreation activities within the District. Although provision of recreation sites and opportunities by the BLM may change the type of recreation activities selected by local residents, no change in overall income or employment within the District is expected. BLM's provision of stumpage was assumed to support jobs in the lumber and wood products industry. A large portion of this industry's output is sold outside the District, bringing additional income and employment to the District. Reduced employment and personal income under Alternatives C, D, E, and the Proposed Action cause reductions in consumer spending. The impacts of reduced consumer spending, including reduced recreation related spending, are captured in the analysis of secondary (indirect and induced) impacts. Your plan ignores the cumulative effect of the

growing number of constraints on timber harvesting from private and public forests across the nation. The United States could actually be running out of forest products and not realize it!

**Response:** The BLM has not directly analyzed the cumulative effect of policies which constrain timber harvest in public and private forests. However, some of these effects, particularly those associated with National forests, have been captured through the use of the Timber Assessment Market Model (TAMM). The model was used as part of the timber supply analysis conducted at the Pacific Northwest Research Station. Refer to Appendix T, in this PRMP/FEIS.

**Comment:** BLM has under/over estimated the economic impacts of its Alternatives by selecting an inappropriate baseline. BLM should update/change the baseline used.

**Response:** The economic analysis was conducted to identify absolute levels of employment and personal income dependent on BLM commodity and amenity use levels. To conduct the analysis, using an ordinal measuring system to estimate impacts, would require establishment of a baseline for analysis. Given the lag in data required and the length of time required to conduct the analysis, we felt this would not be an effective analysis method.

A 1984-1988 baseline consistent with other resources analyses was established only to provide general discussion of net changes and the relative importance of the absolute levels of employment and personal income identified.

This 1984-1988 baseline remains unchanged, however, additional and updated information has been added. In addition, a brief discussion of the cause of economic trends (especially changes in lumber and wood products employment) has been included.

**Comment:** The BLM should give higher priority to recreation management and development. Intensive resource use (clearcutting) is incompatible with a sustainable tourism industry.

**Response:** Although certain industries may consider amenity values, including recreation opportunities, when selecting a location quantifying economic impacts associated with these values, it is difficult and almost impossible to assign to a specific ownership or land allocation. Although not economically quantified, the ability of BLM-administered land to meet future recreation demand under varying levels of resource commodity use (timber harvest) has been examined (see Table 4-REC-1 in the Draft RMP).

**Comment:** BLM should have an obligation to the O&C counties to at least maintain current harvest levels. Where are the people of southern Oregon going to come up with several million dollars to maintain current levels? The BLM had better wake up and realize that people count too!

**Response:** BLM has no authority to make up any reduction in O&C revenues to the counties. However, Congress in recent legislation has defined a formula to set minimum O&C payments to be made to the counties. Additional revenue required to meet minimum payments is derived from U.S. Treasury receipts.

**Comment:** What is the relationship between the estimated personal income and employment dependent upon BLM timber harvest and timber management activities to the total personal income and employment from all sources in the planning area? A breakdown by source is essential. Of special interest is the amount of personal income and employment dependent upon the retirement community and tourism/recreation.

**Response:** The presentation of economic impacts has been changed to display dependent employment and income by general economic sector. This change better aligns the presentation and analysis of economic impacts with the integrated nature of the proposed action and moves away from the individual commodity based analysis traditionally conducted. Because the expenditures associated with the retirement and tourism industries occur in many sectors, we are unable to identify the total size of these industries in the District.

- Comment: The BLM should estimate and include future economic contributions of existing, planned and potential development in the planning area, rather than just specific levels of BLM resource outputs.
- Response: The Medford District PRMP/FEIS examines the effect of alternative BLM actions in the District. Some existing and proposed development actions in the District have been identified to inform readers of the economic climate in which BLM action will occur. These are not BLM actions, and the analysis remains focused on the effect of alternative BLM actions in the Medford District.
- Comment: The BLM should more explicitly acknowledge the relative insensitivity of the western Oregon economy to changes in BLM timber production.
- Response: Additional information displaying overall income and employment in Jackson and Josephine counties, as well as the State of Oregon, has been added to Chapter 3. We believe this added information allows identification of the relative economic importance of BLM commodity and amenity uses.
- Comment: Further uncertainty is introduced by the fact that the projections were made using a model that had not been validated (page 4-109, paragraph 4).
- Response: As with all predictive models, accuracy is unknown until the predicted future becomes the past. We believe the limitations of predictive models used are adequately identified in the document and are generally well known.
- Comment: Higher prices will result in the northwest forest products industry becoming less competitive and thus a decline of production capacity is sure to follow.
- Response: The estimated employment and income levels are dependent on BLM's provision of commodities and amenities, including stumpage. Lumber and wood products employment and income under Alternatives C, D, E, and the Proposed RMP are lower than current levels and do represent a decline in production capacity.
- Comment: The Medford District has assumed worker migration, counseling, retraining, and other social programs will be mitigated.
- Response: The BLM has recognized these factors and programs that may assist displaced workers. However, no suggestion has been made that all workers will be assisted or that these measures will erase the lifestyle and emotional losses associated with the loss of employment.
- Comment: O&C receipts will decline under the preferred alternative. These declines will occur at the same time as social service needs are increasing. Impacted programs include health and human services, mental health, environmental health, and law enforcement.
- Response: These impacts have been identified in the document (see Chapter 4, Community Stability).
- Comment: The plan undermines BLM's commitment to provide a permanent source of timber and contributing to the economic stability of local communities and industry as required by the O&C Sustained Yield Act of 1937.
- Response: The BLM maintains it has met the contribution to community stability requirements of the O&C Act by identifying management objectives in the proposed action that ensure continued sustainability and even flows of forest resources from BLM-administered lands in western Oregon. These forest resources include: timber, water, recreation, native species, soil productivity, mineral materials, grazing, and special forest products. Flow of timber resources will be reduced from historic levels because previous levels of harvest have been determined to be incompatible with sustained flows of other forest resources.



## Rural Interface Areas

- Comment:** BLM's strategy of buffering rural interface areas adjacent to Federal lands will do little to alleviate new inappropriate developments in rural interface areas.
- Response:** The PRMP strategy is intended only to address the relationship to existing and planned development. Development of private lands will be guided by local comprehensive plans in conformity with statewide planning goal 4. The BLM has no direct authority to limit or constrain development on private lands.
- Comment:** Increase BLM's participation in Oregon's statewide land use planning program.
- Response:** When the PRMP/FEIS is approved for implementation we expect to participate in statewide and local planning whenever proposed adjacent land uses are perceived to be inconsistent with PRMP goals and objectives.
- Comment:** The BLM should have clear policy guidance for addressing rural interface issues.
- Response:** The RMP will define the objectives against which we will measure the significance of future rural interface land use issues.
- Comment:** In cooperation with the State, establish and apply a revised definition of rural interface areas which takes into account, existing uses, current Federal, State and local plans, and other land use factors.
- Response:** After the PRMPs are complete, such a comprehensive effort can be considered. Such an effort would be dependent on the availability of local, State and BLM staffing to participate, consistent with management prioritization of workloads.
- Comment:** We request a Best Management Practice be developed to reduce fire hazard and improve wildlife habitat on BLM-administered land one-half mile or less from rural interface land. We support practices such as breaking the fuel ladder, using low intensity prescribed fire, and funding fire control for reasons in addition to site preparation.
- Lack of management in the rural interface areas, will over time, create a perilous situation of buildup of fuels and overstocked stands subject to serious fire and insect risks. We submit that the BLM should propose a very assertive posture in these areas to manage stocking, reduce wildfire potential, foster positive landowner relations with neighbors and create overall a healthier forest.
- Response:** A prescription will be developed for each prescribed fire. BMP's may evolve over time in the use of prescribed fire to reduce natural fuel hazards.
- Comment:** We strongly recommend that BLM use Alternative E's estimate of rural interface acreage (235,000 acres) that is likely to be impacted by development (Vol. 1, pp. 2-51). It is extremely important that figures for this impacted acreage be as accurate as possible since the public needs to know the costs of fire protection for these outlying dwellings and the devastating impacts on forest land when fire fighting resources must be diverted from forest fighting to protecting dwellings. The Evans Creek fire is a good example.
- Response:** It is estimated that if the proposed resource management plan is implemented, that management activities could be altered on 137,500 acres of BLM-administered land.
- Comment:** I am concerned about the VRM Class IV classification given to the BLM land around my home. One of the areas designated for possible clear cut is directly across Cobleigh Road from my home and is a major part of the view out my living room window. I feel that heavy timber harvest-

ing would destroy the natural beauty of this neighborhood, and the subsequent spraying of herbicides would adversely affect our water and air quality, especially since one of the Class IV designated areas is directly uphill from our water supply. Herbicides are not conducive to human, animal and crop health.

We are very concerned about the VRM Class IV classification given to the BLM land around our home, which is one of the areas designated for possible clearcut. Approximately 1/4-mile of our driveway borders the BLM. Heavy timber harvesting along our driveway would devalue our property, as well as destroying the natural beauty of our entire neighborhood.

**Response:** It is estimated that if the proposed resource management plan is implemented, that management activities could be altered on 137,500 acres of BLM-administered land within one-quarter mile of private land in identified RIA's (zoned for 1-20 acre lots) to mitigate adjacent neighbors concerns. These lands would also be managed under VRM Class III rather than Class IV. The herbicide issue is outside the scope of the RMP and was analyzed in BLM's 1989 EIS, Western Oregon- Management of Competing Vegetation, and BLM's 1986 EIS, Northwest Area Noxious Weed Control, as supplemented in 1987.

**Comment:** We request a prescription for public involvement be developed which requires "close neighbor" notification where land disposal by sale or exchange is under consideration. We oppose commercial forest land exchange or sale in rural areas without full disclosure to owners and tenants regardless of whether BLM judges such disposal to be "highly controversial."

**Response:** Any action such as a land exchange or disposal would be an action that would require an environmental assessment. While there is no Council of Environmental Quality or BLM policy requiring public involvement for action analyzed through EAs, it has generally been the policy of the Medford District to make the following types of EAs available for public review and comment: timber sales, large rights-of-way, land exchanges, those associated with site-specific activity plans and others that may be of high public interest.

**Comment:** The State Land Conservation and Development Commission has recently adopted new administrative rules governing the building of homes on what is considered now to be "small-scale resource land." This is LCDC's answer to their long-standing debate over rural lands that many counties, including Jackson County, considered "miszoned," and overly protected. The new rules will be released within the next two weeks, and Jackson County will have until May, 1995 to designate small-scale resource lands, according to a recent memo from Laurel Prairie-Kuntz, Assistant Planning Director for Jackson County.

The Draft RMP specifies 95,346 acres of private land in Jackson County that is within 1/2-mile of BLM-administered lands, and another 142,449 acres of BLM-administered lands within 1/2-mile of private lands in the RIA. Further, 37,425 acres are identified as commercial forest within the RIA. Based on the above information which clearly indicates that the acreage in rural Jackson County which will be available for housing development will increase substantially in the coming two years, we must assume that BLM's estimates of RIA acreage and public timberland which will be impacted, and thus have to be managed more restrictively, is far below the actual levels.

**Response:** The RIA is defined as BLM-administered land within one-quarter mile to one-half mile of private land zoned 1-5 acre lots or 6 to 20 acre lots. See Chapters 2 and 3 for more information on the RIA definition and impacts.

**Comment:** The proposed 1/4-mile buffer zone between common property lines of BLM and private landowners is unacceptable. The allowable timber harvest volumes are reduced because the buffer zone acres are taken out of the base. I recommend a selective harvest approach in these "sensitive" areas. A portion of the timber volume may be harvested while leaving an aesthetically appealing condition for the adjacent landowner.

#### Appendix V

- Response:** It is estimated that if the proposed resource management plan is implemented, that management activities could be altered on 137,500 acres of BLM-administered land within one-quarter mile of private land in identified RIA's (zoned for 1-20 acre lots) to mitigate adjacent neighbors concerns.
- Comment:** BLM's State Office should provide policy guidance to Districts for addressing rural interface issues.
- Response:** According to Bureau regulations for preparing RMP's "the State Director shall provide quality control and supervisory review, including plan approval for plans and related environmental impact statements and shall provide additional guidance, as necessary, for use by District and Area Managers. (For more information see Appendix D, State Director Guidance for the RMP Process).
- Comment:** We recommend recognition of the need for helicopter access policies and practices in rural interface areas that include hours of operation, noise abatement, safety and related concerns.
- Response:** Chapter four has been revised and includes a discussion of helicopter noise and its impacts on adjacent landowners.
- Comment:** BLM has analyzed conflicts with citizens over certain management based on how close people are to the proposed action. BLM should reconsider this analysis based on the kind of action proposed and how intense the action is (i.e., herbicide use or clearcutting proposed anywhere will create citizen conflict).
- BLM should consider and display the costs of protests, appeals and court suits that have occurred during the past decade when considering management options for the District.
- Response:** Rural interface area conflicts are based upon the relationship of neighbors living adjacent to different forest management practices (see Chapter III, pp. 3-123 through 3-130 for more information). Protests and appeals of BLM actions are summarized in Table 3-RIA-1, Draft RMP.
- Comment:** The objectives of the preferred alternative fail to include adoption of special grazing management practices close to rural interface areas despite substantial evidence of problems (pp. App. 2-1). We urge you to include special practices to minimize conflict between rural residents and BLM permitted cattle.
- Response:** The grazing issue is outside the scope of the RMP and was analyzed in BLM's 1984 EIS and ROD. An updated version of the Livestock Grazing Rangeland Program Summary is presented in Appendix 1-E, Draft RMP.
- Comment:** While the EIS did acknowledge that Rural Interface Area residents in some communities are concerned about BLM-management practices (App. 3-54 through 3-57) and that the majority of Oregonians strongly oppose clearcutting (Table 3-SE-1, rp. 3-119) and presumably its "visual equivalent" of leaving 6-8 green trees per acre, the potential cumulative negative impact of VRM Class IV management upon residential property values and tax revenues related to these values was not discussed. The revised EIS should provide information on the important of scenic beauty of current owners and prospective buyers as measured by appraised values and reported sale prices. Comparisons in assessed values between existing impacted areas and unimpacted areas in the District would be useful. Estimates should be provided on the numbers and location of properties potentially affected and the potential losses not only to owners, but also to government (i.e., capital gains taxes, county property taxes), and also to the construction industry.
- Response:** With the spatial arrangement of BLM public lands being a checkerboard pattern it is very difficult to not have a neighbor adjacent to almost every piece of property. The type of study suggested would be a very large project and not one that the BLM could undertake at this time. BLM

activities in the Rural Interface area will be analyzed with the adjacent neighbors concerns taken into consideration.

**Comment:** Implement an alternative that will minimize rural interface area (RIA) conflicts over time while improving the health of the surrounding forest.

The BLM needs to display and consider the additional costs to BLM of rural interface management conflicts in the past decade and potential costs for RIA conflict for each proposed alternative.

The BLM should broaden its RIA analysis of potential conflict to include citizens who are not direct neighbors to rural resource management activities.

**Response:** Alternative E identifies the most public land in the rural interface area and thus is the most restrictive in that regard. It identifies 235,000 possible acres where management activities could be altered on BLM-administered land within one-quarter mile of private land. These lands would also be managed under VRM Class II objectives. Herbicide spraying, clearcutting, and the use of prescribed fire for timber management would be prohibited.

The type of study suggested would be a very large project and not one that the BLM could undertake at this time. BLM activities in the Rural Interface area will be analyzed with the adjacent neighbors concerns taken into consideration. The BLM has also taken into consideration concerned citizens that do not live adjacent to public lands through their public involvement activities. These activities have included mailers or brochures, public meetings, open houses, field trips, distribution of planning documents and related comment periods, informal contacts, group meetings, and written letters.

**Comment:** The RIAs as defined in the preferred alternative, are too vague and unrestrictive to ensure that property values and aesthetics will not be significantly compromised. The RMP calls for RIAs of one-quarter mile in residential areas zoned 20 acres or less. The RIAs should be guided under VRM Class I objectives. This would allow for some uneven-age prescriptions to be implemented within the RIA. In addition, the RMP calls for strict avoidance of herbicide use within the RIA and the discouragement of through traffic on BLM roads within the RIA.

**Response:** It is anticipated that allocating lands to timber production or other land management activities within the RIA would create some level of controversy with some communities or neighbors no matter how lands are managed within the RIA. This is an unavoidable adverse effect.

The PRMP allows for altering management actions where feasible on many of these designated rural interface areas.

**Comment:** In its preferred alternative, BLM attempts to ameliorate public concern by modifying resource management practices, shifting the resource value to fit the local attitudes, disposing of highly sensitive lands through land exchanges, or educating the interface area public as to resource management techniques and cycles. While some of these options are viable possibilities, the face of pressure from rural residents, rather than taking a more assertive, proactive posture toward protecting resources and limiting inappropriate rural development in forest areas.

SOTIA echoes the State of Oregon's comments, which stated "Broader public interests should not be compromised or lost simply to accommodate individual private gain."

**Response:** The PRMP with regard to Rural Interface Areas, merely mentions that management options could be modified when possible to mitigate adjacent neighbors concerns. Examples given were changing from hand application of herbicides rather than aerial applications, or handpiling slash for burning as opposed to broadcast burning. It doesn't imply that whole scale operations and projects will be shut down and revenue to the county and proper management of the public lands will cease. The PRMP and other alternatives have been developed in accordance with the

land use planning process authorized by the Federal Land Policy and Management Act of 1976 which provides a policy framework for all decisions and actions.

## Consistency with other Agency Plans & Programs

- Comment:** Document how the selected alternative complies with the statutory authorities and regulations of the Oregon Coastal Management Program.
- Response:** This documentation is provided in Appendix Y, Table Y-3, Relationship of Proposed RMP to Statewide Planning Goals.
- Comment:** Acknowledge that preservation of BLM wetlands contributes to attainment of the Oregon Benchmark goals on wetlands.
- Response:** A statement has been added.
- Comment:** The PRMP/FEIS should better outline how the alternatives compare to the following: Recovery Plan for the Northern Spotted Owl, the Forest Service EIS on Management for the Northern Spotted Owl, the Endangered Species Committee Record of Decision, Alternatives for Management of Late-Successional Forests of the Pacific Northwest, and A Conservation Strategy for the Northern Spotted Owl.
- Response:** The first of these is only a final draft agency document, "discussion has been added to the Consistency With Other Agency Plans and Programs section of Chapter 4. The second has been rendered moot by court ruling and superseded by the SEIS and its Record of Decision. The third merely required that BLM consult with the Fish and Wildlife Service before proceeding with certain timber sales, and such consultation is embedded in the process for completing and implementing this PRMP. The last two are considered ad-hoc reports. The first of these two makes no single set of recommendations. The last makes a single set of recommendations which are specifically followed in Alternative D only.
- Comment:** The Draft RMP fails to comply with the USF&WS Spotted Owl Recovery Plan.
- Response:** The Fish and Wildlife Service's Biological Opinion on the SEIS says that the SEIS plan, which is incorporated into the Proposed RMP, provides protection for more known spotted owl sites and currently suitable habitat than does the Final Draft Recovery Plan (FDRP), and that the number of acres subject to matrix management is less than under the FDRP. Thus, we believe it meets the objectives of the FDRP.

## Requirement for Further Environmental Analysis

- Comment:** The PRMP/FEIS should identify criteria for determining what sort of NEPA documentation will be required for future projects. In addition, it should provide guidance for the scope of analyses expected in these tiered documents, to clarify what analyses and issues are considered fully addressed in the PRMP/FEIS, and what analyses and issues should be further considered based on site-specific resources and conditions.
- Response:** The BLM National Environmental Policy Act Handbook provides some guidance on this topic. Supplementation of that guidance, with specific reference to the western Oregon RMPs seems premature until we gain experience relating to the ecosystem management concept and its many new management approaches.



- Comment:** The Further Analysis section should clearly disclose the cumulative watershed effects analysis procedure to be used for site-specific projects during PRMP implementation. At present it appears undirected, fails to consider fish and fish habitat and is simplistic. To be credible, the process must be peer reviewed and deemed acceptable.
- Response:** The discussion has been strengthened to address the relationship to the watershed analysis process and how that process will enhance cumulative impact analysis. The watershed analysis process is still evolving as the BLM and Forest Service conduct pilot analyses.
- Comment:** Describe how cumulative watershed effects analysis will be coordinated among adjacent landowners.
- Response:** Information available from private landowners will be gathered and considered. Most private management plans, however, are subject to change due to changing economic conditions, so we will make some assumptions about probable private management.

## **Use of the Completed Plan**

- Comment:** Detail how BLM intends to integrate management, monitoring and research to continually apply adaptive management and improve the scientific basis for ecosystem management.
- Response:** The discussion in Chapter 2, has been expanded. Further elaboration is contained in the SEIS ROD and its Monitoring and Evaluation Plan.
- Comment:** Clarify how timber sale volumes and associated programs will be reduced if annual funding is not sufficient to support monitoring.
- Response:** The discussion in Chapter 2 has been expanded.
- Comment:** Do not plan any timber sales until there is an approved PRMP and all court injunctions are lifted.
- Response:** Since planning of individual timber sales usually takes a year or more, it would be irresponsible for BLM to defer all such planning until final PRMP approval. Tentative site-specific plans based on unapproved versions of the RMP can be adjusted as needed to conform to the PRMP as approved.
- Comment:** Individual forest project plans should evaluate protection needs for intermittent order 1 and 2 streams, and apply protection as needed to protect channel integrity and identified beneficial uses. Project planning should also evaluate potential cumulative effects on beneficial uses outside the project area sub-basin.
- Response:** The Aquatic Conservation Strategy which is part of the Record of Decision for the SEIS, addresses this concern and is incorporated in our PRMP. Watershed analysis will address it at the sub-basin level.

## **Monitoring**

- Comment:** Detailed monitoring plans should be developed within one year after final plan completion. They should contain procedures which have undergone appropriate peer review. They should also identify thresholds which trigger changes in practices or procedures or result in plan changes.
- Response:** Further detail in the monitoring plan awaits refinement of the Monitoring and Evaluation Plan for the SEIS.

## Appendix V

- Comment:** The monitoring plan should include written standards for sampling design, monitoring parameters, analytical techniques, statistical methods, reporting units, location of sampling, indicator species, budget, and procedures for using data or results in plan implementation, and availability of results to interested and affected groups. It should also have a clear feedback mechanism which enables the use of monitoring results to adjust standards and guidelines, BMPs, standard operating procedures, monitoring intensity, and project implementation.
- Response:** We believe some of these details belong in technical handbooks. Others will be developed after the SEIS Monitoring and Evaluation Plan is refined or within the SEIS Monitoring and Evaluation Plan.
- Comment:** Why aren't monitoring standards presented for each land allocation, old growth emphasis areas, connectivity areas, general forest management areas?
- Response:** This kind of stratification is included in the SEIS Monitoring and Evaluation Plan for the allocations made in the SEIS Record of Decision. The proposed RMP Monitoring Plan parallels the SEIS Monitoring and Evaluation Plan.
- Comment:** Why haven't monitoring questions been tied to measurable standards?
- Response:** For most topics, this tie awaits completion of the SEIS Monitoring and Evaluation Plan.
- Comment:** Is a threshold level plus/minus 10 percent appropriate for changes in all resource outputs or impacts to resources.
- Response:** No. The 10 percent figure is explicitly linked only to changes in the PSQ. For other output, resource thresholds would be linked to confidence in the original estimates, which typically are lower than for the PSQ calculation.
- Comment:** Is there a tie between implementation and effectiveness, which is necessary for meeting the expected future condition (ecosystem management)? Does BLM have a long-range monitoring framework which will direct the agency over the next 100 years in order to meet these expected future conditions?
- Response:** The Monitoring and Evaluation Plan for the SEIS is expected to provide both the tie and the framework.
- Comment:** The extent of cumulative watershed effects analysis validation should be described.
- Response:** This description awaits refinement of the SEIS Monitoring and Evaluation Plan.
- Comment:** Consider on-site inspection to monitor BMP implementation.
- Response:** This will be part of contract administration.
- Comment:** Consider RMA monitoring to assess long-term organic debris contribution to stream systems.
- Response:** The SEIS Monitoring and Evaluation Plan calls for this in Key Watersheds. It is also incorporated in our Monitoring Plan.
- Comment:** Consider a research/monitoring program to determine the effects of spatial/temporal segregation of timber harvests on sediment and hydrology.
- Response:** Consideration of this awaits refinement of the SEIS Monitoring Plan.
- Comment:** To obtain more specific data from evaluation and monitoring, subdivide analytical watersheds greater than 10,000 acres into smaller units.

- Response: Much of the aquatic systems monitoring will focus on watersheds smaller than 10,000 acres.
- Comment: Monitor activities in each watershed to determine cumulative effects on water, soil, fish and other resources.
- Response: The cost of monitoring multiple effects of all activities on all ownerships in each watershed would be exorbitant. We believe our monitoring must be cost effective and priorities must be influenced by the amount of BLM activity in a watershed, resource sensitivity, and our ability to generalize meaningfully from what we expect to learn.
- Comment: Mining activities in or adjacent to streams should be monitored to determine if they are adversely affecting riparian area vegetation.
- Response: Such effectiveness monitoring may be included in the SEIS Monitoring and Evaluation Plan. Activities in approved plans of operations would be monitored for conformity to RMP direction (implementation monitoring).
- Comment: Give more attention to monitoring the population and geographic distribution of special status plant species.
- Response: Conservation of the special status plant species will include preparation of management plans considering the geographic distribution of these species and the role of BLM populations in the survival of the species. As needed to conserve the species, these plans will direct: determination of species requirements where BLM can act to enhance survival or recovery, implementation of BLM actions in recovering or enhancing the species and assessment of the effectiveness of those actions. Sampling of population trends will be a means of assessing what needs to be done as well as effectiveness and appropriateness of these actions in recovery of the species.
- Comment: Use recent advances in technology to monitor special status plants, especially listed plants. Address monitoring of special status plant species in more detail.
- Response: Monitoring guidelines in the RMP must be general in nature. There is too much variation between populations and site specific management objectives to provide more detail. More detail will be developed during activity planning following the completion of the RMP and refinement of the SEIS Monitoring and Evaluation Plan. The most cost-effective technology will be used.
- Comment: Monitor to assess impacts on Oregon sensitive species.
- Response: The SEIS monitoring plan will define the extent of special status species monitoring for those species which occur in special habitats. Species in the FEMAT matrix or those not in special habitats will be monitored if monitoring is prescribed in an Environmental Assessment for a proposed action.
- Comment: Monitor to ensure target levels of dead-and-downed wood are attained.
- Response: The SEIS Monitoring and Evaluation plan addresses this.
- Comment: Address monitoring of special status plant species in more detail.
- Response: Monitoring guidelines in the PRMP must be general in nature. There is too much variation between populations and site-specific management objectives to provide more detail. More detail will be developed during activity planning following the completion of the PRMP.
- Comment: RMA monitoring should focus partly on amphibians or other key dependent species.
- Response: The extent of such validation monitoring in Riparian Reserves will be defined by the SEIS Monitoring and Evaluation Plan.

*Appendix V*

- Comment: Monitoring fish and fish habitat in one stream per resource area seems insufficient.
- Response: All key watersheds will be monitored.
- Comment: Previously logged areas should be selected for study and monitoring of experimental efforts to restore old growth conditions.
- Response: Such studies are ongoing in existing monitoring and research programs by other agencies. Some areas have been identified where past logging on BLM-administered lands appears to be leading to early development of old growth conditions, and these are being monitored.
- Comment: A monitoring program should be established to identify noxious weeds before they become a problem.
- Response: As part of the Cooperative Agreement between the Oregon Department of Agriculture (ODA) and BLM, ODA conducts noxious weed field surveys, collects and redistributes biological control agents, and monitors results and efficiency of bio-control sites. Noxious weed infestations have already been identified with townships and sections. We continue to locate problem areas during proposed project planning when sites are surveyed.
- Comment: Incorporate the rural interface issue into BLM's agreement for monitoring implementation of BLM plans.
- Response: Rural interface area monitoring is included in the PRMP Monitoring Plan.
- Comment: Cumulative impacts of pesticides, poisons, and chemicals must be monitored.
- Response: The cumulative impacts of pesticides and other chemicals will be addressed in individual environmental assessments prepared to identify the impacts that may result from their use on specific projects.
- Comment: Oregon Department of Environmental Quality has conducted intensive water quality studies in western Oregon and BLM should obtain and use those study results as part of the monitoring programs on streams that cross BLM-administered lands.
- Response: BLM will make efforts to obtain and incorporate data from monitoring studies conducted by other Federal and State agencies whenever appropriate.
- Comment: Monitoring and evaluation of the approved RMP should be conducted annually.
- Response: BLM will prepare an annual report of progress for implementation of the RMP beginning in the second year after the final plan is approved.

BLM LIBRARY  
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DENVER FEDERAL CENTER  
P.O. BOX 25047  
DENVER, CO 80225

# **Appendix W**

## **Comment Letters from Federal, State, and Local Government**





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1600 South Avenue  
Seattle, Washington 98101

DEC 18 1992

REPLY TO  
ATTN: DW-126

David A Jones, District Manager  
Medford District  
Bureau of Land Management  
3000 Biddle Road  
Medford, Oregon 97504

Dear Mr. Jones:

The Environmental Protection Agency (EPA) has reviewed the draft Resource Management Plan (RMP) and Environmental Impact Statement (EIS) for the Medford District, Bureau of Land Management. Our review was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 302 of the Clean Air Act, which directs the EPA to review and comment on all federal draft and final EIS's. We provided scoping comments on the Proposed State Director Guidance on July 15, 1989, and on the draft Prototype Monitoring Plan on November 15, 1991.

The draft RMP/EIS presents seven alternatives that could direct BLM land management activities on the District's 868,300 acres in Douglas, Jackson, and Josephine Counties, Oregon for the next ten years. The goal of the Preferred Alternative (PA) is to manage BLM lands to contribute to community stability consistent with maintenance of ecosystems. It includes provisions for an annual seed quantity (ASQ) of 105 million board feet of timber, a 50 percent decrease from the 1984-88 cutting level.

EPA is pleased to see the identification of 28,000 acres of watershed defense, commitment to monitoring, commitment to evaluating cumulative watershed effects, and discussions regarding biodiversity and global climate change issues in the draft RMP. These are difficult issues to address in a programmatic document, and the BLM should be commended for addressing them as a part of its planning process. In addition, the Volume I and Appendix discussions comparing alternative proposals with the 50-11-40 dispersal criteria proposed by the Interagency Scientific Committee was very informative.

EPA is raising the draft EIS's (Environmental Concerns-Insufficient Information). Our environmental concerns are based on the need to improve water quality Best Management Practices (BMPs), the monitoring plan, and the cumulative watershed

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effects analysis process that provide adequate safeguards to ensure that site-specific projects implementing the RMP will not adversely impact currently degraded watersheds. More specifically, our environmental objections include the following:

- The potential for further water quality impacts and beneficial use degradation in Bear Creek and other streams which have severe nonpoint source pollution problems, and which are water quality listed.
- The lack of riparian zone protection for first and second order streams (75 percent of the stream miles in the Medford District, which may cause violations of water quality standards and impacts to beneficial uses;
- The potential for adverse impacts to fisheries related to the prediction that 8 to 12 watersheds are declining depending on the alternative;
- The direct health and safety impacts of prescribed burning in rural interface areas and the indirect air quality impacts of the District firewood program that may contribute to the Medford/Ashland non-attainment area;
- The potential for impacts to threatened species listed under the Endangered Species Act, including the northern spotted owl;
- The lack of RMP direction regarding future environmental analysis for site-specific project proposals; and
- The arbitrary use of a ten year timeframe to distinguish between short-term and long-term resource impacts regardless of the lifespan associated with specific resources.

The following additional information and clarification is requested:

- Establishment of better riparian zone protection for first and second order streams;
- Clarification of the need for and criteria for use of prescribed burning in rural interface areas and an expanded discussion of mitigation measures related to the District firewood program;
- Documentation of consultation activities under Section 7 of the Endangered Species Act; and
- Clarification and direction for future project environmental analyses to be sent to the RMP.

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We appreciate the opportunity to review and provide comments on this draft EIS. An explanation of the EPA rating system for draft EISs is enclosed for your reference. This rating and a summary of EPA's comments will be published in the Federal Register. If you have any questions about our comments, please contact Wayne Elson in our Environmental Review Section at 206/553-1468.

Sincerely,

Charles E. Findley  
Director, Water Division

Enclosures: Review Comments  
Impact Definitions  
Riparian Policy  
Rating Outline

cc: D. Deen Stokes, BLM State Director  
Roger Wood, ODES

U.S. Environmental Protection Agency (EPA)  
Review Comments

Medford District, Bureau of Land Management (BLM)  
Resource Management Plan (RMP)  
and  
Draft Environmental Impact Statement (EIS)  
Oregon

December, 1992

# INTRODUCTION

As noted in our transmittal letter we have several concerns about the proposed action. We have identified several issues in the draft RMP/EIS that need clarification, revision or an expanded discussion. We offer these comments in an effort to strengthen the EIS and provide the public with a clearer picture of the environmental consequences of the proposed action and the opportunities for future public involvement with site-specific projects. A detailed discussion of our concerns and recommendations for the final RMP/EIS is presented on the following pages.

## WATER QUALITY

### Water Quality Standards (WQSs) and Beneficial Uses

There are several streams that are listed as having a "severe" nonpoint source problem in the 1988 Oregon Streambed Assessment of Nonpoint Sources of Water Pollution (NPS Assessment Report) and/or are listed as being "water quality limited" or lack beneficial use support in the Oregon's 1992 Water Quality Status Assessment Report (QOAS) Report) where timber harvest and road construction is proposed in the draft RMP/EIS.

The NPS Assessment Report rates Bear Creek as having water quality conditions of severe (with data). Tributaries to Bear Creek are rated as either severe (e.g. Griffer Creek) or moderate (Coleman Creek, Willow Creek). The entire Bear Creek watershed could be rated as severely impacted. The pollution type, resulting in impairments are: nutrient, low dissolved oxygen, pesticides, toxics, bacteria/viruses, sedimentation, low flow, inefficient stream structure, and excessive plant growth. Bear Creek watershed beneficial uses could be further impaired if further logging occurs in the watershed. Bear Creek is also a water quality listed stream and a total maximum daily load (TMDL) has been completed for ammonia, phosphorus, and chemical/biological oxygen demand. The final RMP/EIS should provide a clearer

beak for testing that there will be no contribution of nutrients to the Bear Creek from logging related activities.

Timber harvest and road construction in these watersheds may be implemented without exceeding WQIE or beneficial use impairment. However, the primary methods for preventing standards impairment in the context of an RMP are not developed sufficiently. The basis for our environmental concerns is that timber harvest and road construction may occur without an adequate Watershed Cumulative Effects (WCE) analysis for site-specific projects and that timber harvest deleterious may not occur in aggregated streams as an outcome of site-specific WCE analyses. We are also concerned that water quality monitoring plans are not sufficiently developed to verify that BMPs are preventing adverse effects.

#### Federal Consistency, Section 319 of the Clean Water Act

The federal consistency provisions of Section 319 represent an opportunity for state and federal agencies to more closely coordinate their activities and cooperate in achieving state water quality goals.

The draft RMP/EIS appropriately utilizes the NPS Assessment Report to disclose existing water quality conditions on the district and compares them to those disclosed by the Watershed Condition Index (WCI), a BLM cumulative effects analysis. This is an appropriate use of the NPS Assessment Report that we strongly support. There are additional uses for the NPS Assessment Report that need to be developed for the final RMP/EIS. The NPS Assessment Report together with the 303(b) Report and other data need to be used in the final RMP/EIS to establish:

1. Desired future condition on a stream by stream basis from which RMP accomplishments can be measured. (Title 2-20 can be enhanced in order to make the accomplishment of the objectives more measurable, we suggest that they be linked to the monitoring plan and expressed in terms of percent habitat capability.)
2. Priorities for stream water quality monitoring programs.
3. Priorities for riparian and watershed activity level plan included on page 2-61.
4. Priorities for stream watershed rehabilitation programs.

#### Watershed Cumulative Effects

##### RMP Implementation

The draft RMP/EIS properly evaluates and discloses the potential adverse water quality impacts associated with CWE. We are concerned with the credibility and

application of CWE analyses that will be utilized for site-specific projects during RMP implementation. Until the WCI is validated and peer reviewed, it cannot be used for site-specific projects. Road construction and timber harvest may need to be delayed pending the outcome of CWE analyses for site-specific projects. Any intensive timber harvest projects (large Appendix 2-7) for site-specific projects should be scrutinized to the same extent as the WCI and also be subject to the scientific process. To be meaningful, CWE also need to be considered and watershed protection measures implemented by all major land owners in a watershed.

#### Additional Information

The final RMP/EIS should include the following:

1. A description of the RMP analysis that will be used for future site-specific projects during RMP implementation. The extent of peer review and validation should also be included. If not, a schedule for completing a scientific process should be included.
2. Modify cumulative effects BMP (Appendix 2-7) to include beneficial use impairment identified in the NPS Assessment Report and the 303(b) Report.
3. A BMP that provides for a more conservative site-specific project planning approach when CWE tools are not available, under development or have not been validated. We believe that when adequate CWE tools and monitoring data are not available to predict the extent of future water quality impact and beneficial use impairment, timber harvest and road construction activities need to be reduced to provide for an extra margin of safety.
4. A description of how CWE coordination will be implemented. (On page Appendix 2-8 the activity plan and design best management practices for cumulative effects is to include management activities with other land owners in the watershed. We strongly support coordination among land owners to protect water resources. How will cumulative effect coordination be implemented? Will there be annual meetings, share road construction and timber harvest plans with other land owners? Is there opportunity for all land owners to agree to watershed objectives for water quality protection deferrals and riparian zone protection?)

#### Water Quality Monitoring Plan

##### Concerns

A monitoring plan with water quality elements was included in the draft RMP/EIS. This element is critical for long-term successful implementation of BMPs and resulting water quality and beneficial use protection. While BMPs are intended to protect water quality, they must be monitored to verify their effectiveness.

We are concerned that the monitoring plan be well thought out. Sampling parameters and sample sites need to be carefully chosen. Coordination with other local, state, and federal agencies is important to avoid duplication and make efficient use of limited resources. Sampling priorities should be consistent with problem areas identified in the NPS Assessment and 303(b) Reports and other data.

The test status on page 2-62 that timber site volumes and associated programs will be reduced if annual funding is not sufficient to support the relevant actions assumed in the plan, including riparian zone monitoring. This is an important commitment that we strongly support. We are concerned with the practical matter: how the commitment will actually be carried out. How will "not sufficient" be determined? Are timber sale programs and riparian zone monitoring funded separately? Are they a fixed percentage of each other? How will accountability to this commitment be verified?

##### Additional Information

The text on page Appendix 2-6 identifies Bear Creek as water quality limited for biochemical oxygen demand and total phosphorus and that BLM would coordinate with the Oregon Department of Forestry in development of a Bear Creek nonpoint source water quality management program for forest management activities. This would include cooperation with Oregon Department of Forestry to implement a monitoring program that identifies phosphorus levels on forestland. There is no mention of this monitoring effort in Appendix 2-6-1 Monitoring Plan. The monitoring plan in the final EIS should include types of surveys, location of sampling, parameters to be monitored, indicator species, budget, procedures for using data or results in plan implementation in Bear Creek.

A monitoring plan for the final RMP/EIS should include types of surveys, location and frequency of sampling, parameters to be monitored, indicator species, budget, procedures for using data or results in plan implementation, and availability of results to interested and affected groups.

Heptal resources for the development of water quality and biological monitoring plans are:

Monitoring Guidelines to Evaluate Effects of Forestry Activities on Streams in the Pacific Northwest and Alaska, EPA/600/S-91-001, May 1991.

Rapid Bioassessment Protocols For Use in Streams and Rivers, EPA/444/4-89-001, May 1990.

The water resources section (page Appendix 2-132) of the monitoring plan is vague concerning the validation of the WCI and the intensive method for analyzing watershed cumulative effect in site-specific projects listed on page 2-53, Volume II. The monitoring plan should specifically relate the objectives and strategy for validating these methods. It should include validation of the WCI and any other WCE model or index intended for predicting the water quality effects of site-specific projects.

The monitoring plan on page Appendix 2-132 refers to "within stream" for sampling design, parameters, analytical techniques, statistical methods, and reporting units. No information is included on where "within stream" are located or if they have been prepared. They should be included in the final EIS/RMP. The monitoring plan in the final EIS/RMP should also show location of sampling, indicator species, budget, and procedures for using data or results in plan implementation.

In July 1991, Oregon adopted native biotopes as part of its WQIE. The state is in the process of developing the implementation guidelines for the biotopes and is selecting appropriate reference sites in various subwatersheds in the state. Once this framework is in place, the BLM should coordinate its monitoring locations and protocols to allow comparison with the reference site conditions. This is necessary in order to determine whether the WQIE for protection of biological integrity of the waters are being met. Provisions for this coordination should be spelled out in the final RMP/EIS. In addition the state expects to adopt numeric biotopes in 3-5 years. The BLM entities will be expected to meet these WQIE once they are adopted.

Other suggestion for improving the monitoring plan include:

BMP implementation should be monitored through on-site inspection by appropriate specialists as well as senior site contract administration. Site review may be randomized (e.g., random number table).

RMAAs should be monitored to assess long-term large organic debris contribution to stream systems (e.g., quantity, size, species, delivery rate).

A fisheries monitoring protocol based on identification of sensitive populations and habitat types should be included. Systems should be prioritized/stratified based on stressors and resource risks.

Research/monitoring to determine the effect of dispersion logging (i.e. spatial and temporal segregation of harvest) on sediment and hydrologic impacts as well as cumulative effects should be conducted.

Helpful resources for the development of water quality and biological monitoring plans are:

*Monitoring Guidelines to Evaluate Effects of Forestry Activities on Streams in the Pacific Northwest and Alaska*, EPA/910/9-01-001, May 1991.

*Rapid Bioassessment Protocols for Use in Streams and Rivers*, EPA/444/4-80-001, May 1989.

#### Riparian Zone Protection in First and Second Order Streams

##### Concerns

We are concerned that WQBs will not be met and beneficial uses will not be protected because the draft RMP/EIS provides inadequate protection for Riparian Management Areas (RMA) in first and second order (headwater intermittent and perennial) streams. The final RMP/EIS needs to include full protection of first and second order streams.

These first and second order streams are important in maintaining downstream system integrity and water quality as well as providing fisheries and amphibian habitat/refugia. Disturbed first and second order streams may become sediment sources to downstream areas. In addition, loss of woody vegetation along these headwater streams may eventually lead to reduced large organic debris in downstream reaches. We agree with the draft RMP/EIS which states that the greatest opportunity for improving stream conditions through RMA prescriptions is on first, second, and third order streams.

Our concern for first and second order streams is based on the fact that:

1. The largest percentage of riparian removal is along first and second order streams. Most of BLM administered riparian removal is along these streams. (79 percent of the stream miles are along first and second order streams on the Medford District).

2. The RMA widths are too narrow. RMAs would be weakened through road and logging corridor developments. First and second order perennial streams would be as narrow as 75 feet. The Roseburg draft RMP/EIS states, for example, that RMAs less than 90 feet are considered inadequate for proper riparian function and RMAs less than 150 feet are considered to be functioning at less than optimum level.
3. The draft RMP/EIS overall policy negates first and second order streams to a lower level of protection. The draft RMP/EIS, for example, frequently refers to first and second order intermittent streams that are "without beneficial uses." This is inconsistent with the WQBs and with EPA's regional Riparian Area Management Policy. The WQBs contain a definition of "Waters of the state" that includes all surface and underground waters, including those that do not have a discernible or effect a junction with natural surface or underground waters." First and second order streams are included in this definition. In addition, the tables within the WQBs that list the beneficial uses for each basin include a category of "all other streams and tributaries thereto."

We recommend that the final RMP/EIS include full protection of all beneficial uses in first and second order headwater intermittent and perennial streams.

##### Additional Information

Tree diameter was selected as a surrogate measure of riparian zone health. The final RMP/EIS should indicate whether diameter thresholds were selected based on reference locations within the managed area. Tree species and density data should also be provided. In addition, factors that may limit future riparian zone maintenance and production (e.g., water table alteration) should be described. These parameters should be incorporated into the riparian index of the WCI. To assess management effects, the riparian index must be sensitive to species, density, and environmental modifiers/stressors. The draft RMP/EIS determine RMA age and size based on the Timber Operations Inventory for adjoining upland trees. The final RMP/EIS should address inventory accuracy in predicting RMA parameters.

The final determination of riparian management areas (RMA) width is unclear. Will the allocation to RMA be for the preferred alternative, for example, to meet other on-ground analysis? How will the average widths shown for RMAs be utilized for the on-ground analysis? Are the widths considered a site-specific minimum or maximum? Are there a guide from which the RMA could be narrower or wider?

Different methods of rating riparian zones should be reviewed and/or consolidated for the final RMP/EIS. Consistent rating systems will facilitate and simplify implementation of the RMP and monitoring strategies. (For example, in Table

3-422), riparian zone condition is rated as minimal, fair, and good/optimal by the diameter of the trees in the riparian zone. In the WCI (page 3-24, Volume I) riparian zones are rated poor, fair, and good by percent vegetative cover. In the riparian management objectives (Table 3-20, page 3-107) the riparian ecosystem objectives are rated for low, moderate, and high levels of wildlife and native plant diversity.)

According to the text on page 4-48 a large percentage of riparian vegetation would be removed along first and second order streams. According to Table 4-102-2 Long-Term Riparian Condition (Percent of Riparian Zones) first and second order streams take all. How many board feet will be harvested in first and second order streams in the Preferred Alternative. It is unclear how many trees will be removed in RMAs. This should be clarified in the final EIS/RMP.

#### Watershed Condition Index

##### Concerns

The Watershed Condition Index (WCI) is a reasonable method for comparing watershed effects among the RMP/EIS alternatives, although future refinements could improve its use for that purpose. It is probably the most complex approach we have reviewed for evaluating watershed effects in a programmatic land management plan.

Our greatest concern is that it can in no way be considered a substitute for evaluating cumulative effects on a project by project basis as the RMP is implemented. It also may be inappropriate to compare the index among different watersheds. The large spatial scale of Analytical Watershed Areas (AWA) used in applying the WCI could mask significant resource degradation. For example, sensitive species are not dispersed randomly throughout the AWA.

Because of the way in which the WCI may be used it is essential it be subject to the scientific process. This should include extensive peer review by those outside BLM. Until then it could not be used as the basis for important project level decisions.

##### Additional Information

The WCI does not provide an adequate assessment of synergistic/cumulative effects for dispersing effects on site-specific projects. The WCI appears to be quite subjective and may produce variable results. The final RMP/EIS should provide greater explanation regarding WCI assumptions as well as selection of index constraints. In addition, several index factors may distort actual resource impacts.

The major component which is missing is a way of characterizing the uncertainty in the estimates. This, of course, implies measurements from real systems

and a methodology for evaluating the measurements and assessing uncertainty. The measurement issue is a large one, so we will limit our remarks to methodology. Standard methodologies we suggest for propagating uncertainty are Monte Carlo methods, Latin Hypercube methods and first-order uncertainty. Monte Carlo methods are becoming common in risk and uncertainty analyses; references abound in the environmental literature (e.g., Smith and Peters, 1979). Latin Hypercube methods are a subset of Monte Carlo methods (Iman and Shortenberger, 1984) and first-order uncertainty methods are described in Benjamin and Cornell (1970). Again these methods all require some data with which to evaluate uncertainty in the independent variables (the components of each index).

##### References

- Benjamin, J.R., and C.A. Cornell, *Probability Statistics and Decisions for Civil Engineers*, McGraw-Hill, New York, 1970.
- Iman, R.L., and M. Shortenberger, *A Fortran 77 program and user's guide for the generation of latin hypercube and random samples for use with computer models*, Rep. NUREG/CR-326, SAND-83-0805, prepared for U.S. Nuclear Regulatory Commission by Sandia National Laboratory, Albuquerque, N.M., 1983.
- Smith, L., and R.A. Peters, *Stochastic analysis of steady state groundwater flow in a bounded domain*, 2. Two-dimensional simulations, *Water Resources Research*, 15(9), 1543-1550, 1979.

The following is an example of the difficulty in using the WCI to compare watersheds. The WCI seems to correlate well with the NPS Assessment Report in a number of watersheds in western Oregon. However, the WCI for North Fork Silver Creek in the Medford draft RMP/EIS is nearly double that of most of the other representative watersheds in this "basin." Physiographic information in the NPS Assessment Report do not validate the relative condition of North Fork Silver Creek to the other representative watersheds. According to Fire Control, hydrology for the Galice District of the Siskiyou National Forest, effectiveness and relocation monitoring being conducted as a follow up to the Silver Fire Recovery Project and macrohabitat monitoring by BLM and USFS have shown the North Fork Silver Creek to be in good shape. (Accidentally invariant problems with monitoring and the lack of precipitation may not reflect the entire picture.) It appears that precipitation (P) in the precipitation index of the WCI and burning (B) in the structural index of the WCI may be causing the high overall WCI for the North Fork Silver Creek.

## Best Management Practices

## Concerns

The achievement of WQS for nonpoint source (NPS) activities occurs through the implementation of BMPs designed to achieve WQS. WQS criteria are the measure by which BMP effectiveness is measured. While BMPs are intended to protect water quality, they must be monitored to verify their effectiveness. If found ineffective, the BMPs must be revised. Therefore, the draft EIS should not rely solely on the application of BMPs to satisfy the Clean Water Act (CWA). Since the use of BMPs does not guarantee compliance with WQS, the draft EIS should discuss the effectiveness of BMPs with illustrations of specific project examples and/or monitoring results. For example, the draft EIS could discuss the degree of risk of BMP failure as well as any history of BMP success as illustrated via effectiveness monitoring in similar project areas.

## Additional Information

The activity plan and design BMP on page Appendix B-7 includes a special management practice for defining a watershed from management activities which would "potentially degrade" water quality for five years and then reanalyzing it. This is a feature that we strongly support. To avoid confusion in the future this should be defined. We suggest a combination of monitoring data and CWA analyses be used.

## Fisheries

## Concerns

On page 4-68 the first state that fishery habitat improvement projects "could be effective." We agree with the stipulation concerning fish production potential being tied in part to the installation of fish habitat improvement (e.g., instream structures). Beasly et al. (1991) determined that the retention of vegetation adapted to riparian environments and the natural succession of riparian plants is necessary to recreate sustainable salmonid habitat and should be the focus point for fish habitat improvement programs. They further state that because of frequent negative effects, structural alterations to stream channels should generally be eliminated as a fish improvement strategy. Studies have not shown a relationship between stream improvement projects and salmonid production. We support landscape level planning over restoration programs to accomplish habitat improvement goals.

Retention of riparian areas along third order and greater streams and the placement of instream structures will not lead to anticipated population increases. The fish habitat assessment assumes that riparian area and fish production are directly related. However, acute and chronic stressors such as upstream sediment inputs may

continue to degrade fish habitat. Impacts such as sedimentation persist and accumulate in downstream, low-gradient reaches over decades or even centuries. In addition, migratory species may be limited by habitat used at a single life history stage.

## Additional Information

The District is responsible for the maintenance of sensitive species habitat and the restoration and sustainable management of the resource. To address these issues, EPA supports development of coordinated activity management plans. The final RMP/EIS should provide greater detail regarding plan coordination and implementation mechanisms.

In addition, chronic system stresses (e.g., unstable slopes, landslides, roads, mining) that may further degrade systems prior to recovery are not addressed. For example, the Eugene draft RMP/EIS indicates that debris torrents and landslides have affected channel integrity. The final RMP/EIS should indicate whether these inputs are ongoing and whether further logging would occur in the same geomorphic setting. The final RMP/EIS must address both past and future management scenarios to adequately assess long-term enhancement of anadromous fish streams.

The Fisheries Productivity Rating System needs further explanation. Detail should be provided regarding the related factors analysis, rating system assumptions, and level of baseline data collection. For example, temperature data should include time of collection, stream order, location, and maximum, minimum, and average temperatures.

The draft RMP/EIS lists several fish species of concern. However, information and documentation (e.g., genetic diversity, diversity) regarding these species are absent. Final RMP/EIS should include: (a) a comprehensive biological survey; (b) identification of watersheds supporting productive or valuable remnant populations of the common cutthroat trout, steelhead, and other aquatic biotic; and (c) delineation of a well-distributed network of least disturbed watersheds for conservation or biotic diversity.

Adequate fisheries information is needed to realistically evaluate management alternatives. For example, depressed or declining populations may be unusually sensitive to habitat alteration and degradation. We strongly support the provision for specific information and analysis as well as recommended solutions (e.g., seasonal restrictions on road construction, stabilization methods, restoration of temporary spool roads).

Recovery and restoration plans should be developed based on a watershed analysis and NPS Assessment and 305(b) Reports. In addition, fish habitat and

sediment yield should be utilized to establish/predict habitat quality. The final RMP/EIS should include a table summarizing those sub-watersheds where a timber harvest emphasis would occur (see GOS Bay draft RMP/EIS). Treatments that may further reduce population densities should be avoided.

Finnell (1992) states that preliminary analysis of riparian cover data available from the Oregon Department of Fish and Wildlife for the period 1986-1990 suggests that watersheds having a high proportion of their drainage basins within riparian areas support a disproportionately large percentage of cutthroat trout's remaining viable wild salmon stocks and much of its important chinook salmon fishery. In addition, recent research indicates that chin salmon are perhaps the most sensitive to logging impacts of the anadromous salmonids. Restoration plans should include identification and preservation of potential riparian. In addition, management treatments should be based on the position of sensitive species and current watershed conditions.

An explanation of the statement "BLM ownership in watersheds would be needed to improve watershed management for federal caddisflies and fish and riparian species" should be provided.

## Drinking Water

The draft RMP/EIS states that, "In watersheds providing surface water to public systems serving municipalities, the watershed would be prepared in conjunction with and for community water systems where BLM administers a significant portion of the watershed."

This should be related to need as follows: The goal of watershed management in watersheds providing surface water to public systems serving municipalities, is to assure the needs of the users are addressed and to protect comprehensive water quality. Public water systems must meet increasingly stringent public health criteria required by drinking water regulations. A drinking water treatment cost strategy that protects the public health and is economically and environmentally sound is a necessary component of a watershed plan. The interests and concerns of watershed managers, water system owner/operators, and the drinking water consumers must also be incorporated into a water management plan. Consequently, watershed plans will be prepared in conjunction with and for community water systems where BLM administers a significant portion of the watershed.

An important consideration in some BLM districts, would be mining. If mining activities on BLM lands cause significant increases in the concentrations of metals in streams that supply public water systems, this could force these systems to install

expensive treatment systems to remove these metals. This is a possibility which should be explored thoroughly in the EIS for districts with significant mining activity.

## AIR QUALITY

The air quality analysis is based primarily on compliance with the Oregon State Smoke Management Plan (OSMP) and the State Implementation Plan (SIP). Broad statements regarding compliance with applicable plans and regulations do not inform the public or decision makers of actual anticipated air quality effects. A screening level quantitative assessment of air quality effects is needed to illustrate that burning can be done in compliance with applicable plans and regulations.

## Sensitive Air Quality Areas

The draft RMP/EIS (page 3-6) states that "the Oregon Smoke Management Plan (OSMP), a part of the State Implementation Plan (SIP), identifies strategies for minimizing the impacts of smoke from prescribed burning on the densely populated, designated, nonattainment, and smoke sensitive areas within western Oregon. The text needs to discuss in greater detail and define what is meant by the terms nonattainment, designation, and smoke sensitive. If these terms have regulatory significance they should be discussed in detail in the final RMP/EIS."

Map 3-A-1 in the draft RMP/EIS shows the sensitive air quality areas in western Oregon. The map and the discussion in the final RMP/EIS could be improved if each of the sensitive air quality areas were labeled. The text should identify the sensitive areas that are most likely to be affected by the future site-specific activities in the Medford District. This discussion should also clearly describe why each area has been designated and the significance of each designation.

## Regulatory Requirements

The final RMP/EIS should provide a description of all applicable regulatory and/or permit requirements. The Clean Air Act (CAA) and SIPs require that prescribed burning not cause or contribute to violations of National Ambient Air Quality Standards (NAAQS) or Prevention of Significant Deterioration (PSD) increments. In addition, burning may not cause visibility impairment in federally-designated Class I areas. The discussion must demonstrate that the proposed action will not cause or contribute to any violations of the NAAQS, that it will not cause air quality to degrade by more than any applicable Class I or Class II PSD increments, and it will not cause or contribute to visibility impairment.

## Oregon Smoke Management Plan

The draft RMP/EIS indicates that all prescribed burning activities will comply with the OSMAP. The final RMP/EIS needs to fully describe the OSMAP, i.e., what it allows, what it prohibits, and what is protected. The final RMP/EIS should discuss how effective it has been, since implementation in 1992, in reducing air quality effects. Any monitoring that has been completed to document the effectiveness of the OSMAP should be described. Although most problem burns or intrusions can be attributed to unpredictable events in the rural environment, the OSMAP could still result in intrusions. For example, drift smoke from a prescribed burn can be carried by night time drainage winds into designated areas. The final RMP/EIS should discuss whether the OSMAP consists of provisions to prevent or minimize these types of scenarios.

Another detail about the OSMAP that needs to be discussed is whether different permissible burning conditions exist for different subareas within western Oregon and more specifically within the district. Different burning conditions could affect the amount of allowable burning activity under the OSMAP and SP. This in turn would affect the kinds of site preparation that would be required at the site-specific stage. Any potential burning restrictions of this type need to be discussed and fully described in the final RMP/EIS.

Unintentional "intrusions" of smoke are mentioned on page 3-6 from prescribed burning designated areas is listed for the Medford/Ashland and Grants Pass designated areas. What percent of prescribed fires result in unintentional intrusions? This would be useful information to discuss the overall air quality degradation risks associated with prescribed fire.

The final RMP/EIS standards for monitoring (page 3-130) include a reference to "BLM's smoke surveillance for intrusions. What is a fire? How are intrusions measured? How are they reported?"

## State Implementation Plan (SIP)

The final RMP/EIS should also describe the SIP and its provisions for prescribed burning. The relationship of the SIP and OSMAP should be clearly presented. Any restrictions that the SIP could impose on prescribed burning, separate from the OSMAP, should be discussed.

The draft RMP/EIS states that "prescribed fire smoke emissions will not be a factor in meeting air quality standards for PM10 in western Oregon." The final RMP/EIS needs to provide the basis for this statement. How do the predicted tone of biomass consumption compare to emissions of regulated air pollutants. More

Importantly, how do the predicted tone of intrusions compare to the amount of particulates from prescribed burning that are assumed in the current SIP calculations.

## Prescribed Burning

The draft RMP/EIS presents a breakdown of the kinds of burns included in prescribed burning activities. Table 4-4-1 shows tons of emissions by abatement and fire preparation and other resource burn. A number of other types of burns are identified in the draft RMP/EIS. Prescribed burning includes ecosystem burn, other burn. The air quality discussion in the final RMP/EIS should be expanded to fully describe these types of burning. For example, is ecosystem burning the same as or similar to underburning? Which types of burns are hot and which types are cooler. The temperature of the fires has an effect on smoke dispersion characteristics.

In Table 8-1, page 80 prescribed fire varies from 750 to 3,000 annual acres for decade 1. Underburning varies from 500 to 1,500 acres for decade 1. Are both reflected in the tons of emissions listed in Table 8-2? For the preferred alternative (page 2-44) prescribed fire, including underburning, would be used as a favored tool for fire prevention, fuel hazard reduction, and restore the natural role of fire in the ecosystem. Also, the use of low intensity underburning would be the preferred alternative. The air quality and occupational health effects of underburning should be discussed in more detail in the final RMP/EIS.

The implication on page 3-11 is that hand piled slash for burning is opposed to broadcast burning has less air quality effects to rural interface areas. While the may be true what is the basis?

We understand that underburning is used to reduce undesirable fuel loads without damaging desirable residual vegetation. Typically underburning involves lower fire temperatures which allows the smoke to hug the ground and not attain vertical dispersal. We are concerned about the effects of smoke from underburning on nearby residents and visibility. The final RMP/EIS should provide more discussion about the effects from underburning. It should also focus discussion on the regulatory requirements due with underburning.

On page 4-8 the text states, "Even though the risk of an intrusion is greater during underburning, the severity of the risk because the level of emissions and the amount of fuel burned is reduced compared broadcast and pile burning." Has this been verified through monitoring?

Finally, alternative burning techniques exist that can be used to reduce the impact of forestry burning on air quality. These techniques optimize fuel management, fire ignition for rapid and complete combustion, and mop-up techniques. We believe that the air quality discussion would be improved by including a more expanded

discussion of what practices BLM has been using and any additional techniques that could be used in the future to minimize air quality impacts associated with prescribed burning. This expanded discussion should focus on the different types of burning proposed in the RMP. More specifically, are there ways to effectively deal with the potential problems associated with cooler underburning type fires.

## Rural Interface Areas (RIAs)

We are concerned that the OSMAP and the preferred alternative will put people in the RIA areas at risk. RIAs are defined as BLM land within 1/2 mile of 1 to 20-acre lot or that have residential development. Alternative A, B, C, and D, and Preferred will permit prescribed burns in these areas. Another related concern is that one of the primary purposes of the OSMAP is to keep smoke from forestry burning activities out of densely populated areas. Compliance with the OSMAP will put smoke into areas outside of large urban centers and potentially into smaller communities and individual residences in the rural environment. With underburning smoke is more likely to remain close to the ground and remain in low areas longer than would be expected with a hotter pile or broadcast burn.

Smoke and dust are two of several considerations used in defining the 1/2 mile as level of potential conflict in rural interface areas (page 3-63). Particular concerns are concentrations that exceed health standards have been measured up to three miles downwind of a prescribed burn. The 1/2 mile criteria may raise the air quality impacts of prescribed burning on people living in RIAs and other downwind communities. We believe that this is a significant issue due to the provisions of the OSMAP, preferred alternative RIA policy, and the increased use of underburning.

Concerning the monitoring of rural interface areas (page 3-130), the plan should include a follow-up survey to that mentioned on page 3-64 to see whether improved management of RIAs is reducing concerns by residents.

## Alternatives to Burning

The draft RMP/EIS indicates that not all timber harvest units require treatment by prescribed burning. This discussion should be expanded in the final RMP/EIS. A number of alternatives for removal of slash exist that do not involve burning. A general discussion of the types of options would provide useful information.

The draft RMP/EIS indicates that no treatment or mechanical treatment could result in a higher fuel hazard. We agree that this is a possibility. However, logging residue can be reduced by harvesting systems directed toward maximum utilization of slash material (excluding the trees/limbs left for ecosystem/biodiversity purposes). We suggest that the final RMP/EIS include a goal to improve

harvesting systems to provide economic incentive for increased slash utilization. Use of slash material is dependent on the capability and efficiency of the forest industry to process low grade fiber. The final RMP/EIS should provide some discussion of the economic and technological feasibility of improved slash utilization and the effect on fuel hazard.

Finally, the final RMP/EIS should present a brief discussion about how the decision to burn or not to burn is made. Is this a market driven decision? What are the economics of forestry burning? An analysis of the cost of burning compared to the costs of mechanical removal are warranted. The decision criteria that have been used in the past should be described. More importantly the final RMP/EIS should present the criteria (e.g., cost, silvicultural considerations, air quality considerations, market demand for low grade fiber, ecosystem considerations) that should be considered in the future when a burn/no burn decision must be made.

## Firewood Program

Alternatives D and E include provisions that allow only seasoned firewood to be sold to reduce potential air quality problems of burning green wood. Additional firewood/air quality mitigation measures exist. A description of additional mitigation measures, with which EPA is familiar, are presented in the following paragraph for consideration in the development of the final RMP/EIS.

The Wenatchee National Forest, Neches Ranger District Personal Use Firewood Environmental Assessment, May 1991, included several innovative mitigation measures to reduce the air quality impacts of personal use firewood. The mitigation measures have been implemented and they include: (1) a requirement that piles larger than 12 inches in diameter must be split at least once prior to removal to facilitate drying of the wood; (2) the burning season is closed or September 30th to ensure that firewood is not collected when wet, and some cutting time is available prior to burning; (3) education and informational materials that highlight firewood piling and burning practices that minimize effects on air quality are provided with firewood permits; and (4) a requirement to implement a cooperative management with the local air quality agency on public information and education on firewood use and enforcement efforts on woodpile burning regulations. These mitigation measures should be considered in the final RMP/EIS.

## IMPACT DEFINITIONS

The draft RMP/EIS uses the life of the RMP as the basis for defining short-term and long-term time frames for impact consideration as required by the Council on Environmental Quality (CEQ) Regulations implementing the Procedural Provisions of the National Environmental Policy Act (NEPA). The draft RMP/EIS defines short-term as ten years or less and long-term as greater than ten years. However, application of



a ten-year time frame is not universally appropriate for all resource categories. Our primary concern is for the data found in Bureau of Land Management (BLM) administered lands. A considerable range in life spans exists. Using ten years to define nonrenewable impacts means that some populations of fish and birds, for example, could experience adverse effects from severe generations. This could result in major population and community level impacts.

The definitions of short-term and long-term impact would be greatly improved if the time frame for adverse/potential effects were tied to the natural life spans of individual species rather than the arbitrary number that has been chosen. The Department of Interior has consistently used such an approach in the Outer Continental Shelf (OCS) lease sale EIS. These OCS lease sale EISs are not site-specific, they cover large planning areas and the activities in those areas for several years so they are analogous to a RMP/EIS. The OCS impact definitions are based partly on the length of one generation for each species or group of species evaluated. Thus, the time frame of the impact is tied biologically to the species affected. We are enclosing a copy of the OCS impact definitions for your information and consideration for the final RMP/EIS.

In the case of air quality and water quality impacts ten years is not an appropriate time frame for assessing effects to air and water quality or aquatic habitat. A ten year time frame does not comply with regulatory definitions. We suggest that you develop a definition for short-term water and air quality effects that are consistent with state WQIA and the state implementation plan (SIP). At a minimum short-term air and water quality impacts should occur during the course of specific activities and should be held to the shortest practicable period of time.

#### SPECIAL STATUS/THREATENED AND ENDANGERED SPECIES

##### Management Direction

Direction given in the Federal Land Policy and Management Act (United States Code, Title 43 - Public Lands) states that the public lands should be

"... managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife..." (section 1001 (a) (ii))

Given the status, the final RMP/EIS should explain the rationale for providing different levels of protection for special status plants and animals on OCS vs. public domain lands:

peromyscus leucopus, bald eagle, and northern spotted owl. Information and related management guidance regarding

The final RMP/EIS and Record of Decision should not be completed prior to the completion of ESA consultation. If the consultation process is treated as a separate process and the FWS identifies necessary changes in plan implementation which have not been evaluated in the draft RMP/EIS, a supplement to the RMP/EIS could be warranted.

##### Coordination and Consistency

The draft RMP/EIS presents a great deal of information regarding the northern spotted owl. Since the concern and controversy regarding this species has spanned a number of years, federal agencies, and court cases, there are a number of plans and proposals that address owl populations, habitat, and management. The RMP/EIS should better outline how the alternatives and management direction comply with existing and draft reports and recommendations, such as the Draft Recovery Plan for the Northern Spotted Owl, FWS (1992), Final Environmental Impact Statement on Management for the Northern Spotted Owl in the National Forests, USDA Forest Service (1992), Endangered Species Committee Record of Decision (1992), Alternatives for Management of Late-Successional Forests of the Pacific Northwest, Scientific Panel on Late-Successional Forest Ecosystems (1991), A Conservation Strategy for the Northern Spotted Owl, Interagency Scientific Committee (ISC) (1990).

For example, the final RMP/EIS should compare how the connectivity areas in the RMP compare to the 50-11-40 rule outlined in the ISC report. The draft RMP/EIS states that

"The ISC originally developed the 50-11-40 criteria as a standard to evaluate dispersal habitat across the landscape. This approach works well in the case of the U.S. Forest Service where there is contiguous federal land ownership. However over much of the planning area, the BLM administers only half of the forest lands." (page 4-64)

The implication of the discussion is that the 50-11-40 criteria do not apply well to Bureau lands. However, the ISC was convened through the cooperation of three federal agencies, one of which was the BLM. Presumably, the ISC was aware of federal land ownership patterns as it formulated its recommendations. Therefore, the final RMP/EIS should clarify the similarities and differences between the RMP connectivity areas and the expected results of application of the 50-11-40 rule and the rationale for choosing one strategy over the other in the final RMP/EIS.

Finally, the final RMP/EIS should address management direction for timber sale areas encompassed by the Endangered Species Committee in 1992.

BLM management and permitting actions would also be designed to protect habitats of Category 1 and 2 listed candidate, state listed and Bureau-sensitive plant and animal species on other Oregon and California (OJC) lands where irrigation would not diminish commodity use such as timber production" (page 2-35).

Since the District is 87% OCS land, the final RMP/EIS should also discuss what implications this policy could have on these species and their habitats.

The draft RMP/EIS states that the "... alternative incorporate required levels of protection of listed or proposed species only where critical habitat had been designated or a recovery plan was in effect before the alternatives were formulated." (page 2-61). Since the BLM is currently involved in informal consultation with the FWS regarding the draft RMP/EIS, it seems reasonable that the alternatives presented in the final RMP/EIS could incorporate FWS information about special status species, particularly federally-listed threatened or endangered species, in order to better illustrate the potential effects of BLM management, project, and protection activities regarding these species. The CEO Requirements for Implementing the Proposed Provisions of the National Forest Management Act address the issue of incalculable or unavailable information in 40 CFR § 1502.28. The scope of the final RMP/EIS alternatives and analysis should not be limited to the existence of recovery plans.

##### Consultation with U.S. Fish and Wildlife Service

Since activities conducted under the RMP could effect threatened or endangered species, the final RMP/EIS should include the Biological Assessment and the associated U.S. Fish and Wildlife Service (FWS) Biological Opinion for the following reasons:

- NEPA requires public involvement and full disclosure of all issues upon which a decision is to be made;
- The Council on Environmental Quality (CEQ) Regulations for implementing the Procedure Provisions of NEPA strongly encourage the integration of NEPA requirements with other environmental review and consultation requirements (40 CFR 1502.28); and
- The Endangered Species Act (ESA) consultation process can result in the identification of mandatory, reasonable, and prudent alternatives which can significantly affect project implementation.

The potential effects on listed species are relevant to the subsequent project-level decisions. Both the Biological Assessment and the EIS must disclose and evaluate the potential impacts of the proposed action on listed species, such as the

peromyscus leucopus, bald eagle, and northern spotted owl. Information and related management guidance regarding

The final RMP/EIS and Record of Decision should not be completed prior to the completion of ESA consultation. If the consultation process is treated as a separate process and the FWS identifies necessary changes in plan implementation which have not been evaluated in the draft RMP/EIS, a supplement to the RMP/EIS could be warranted.

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Finally, the final RMP/EIS should address management direction for timber sale areas encompassed by the Endangered Species Committee in 1992.

#### TIMBER MANAGEMENT AND SILVICULTURE

The final RMP/EIS should clarify the BLM philosophy regarding the ASO and identify whether it considers the ASO a goal or a managed level of timber production. The final RMP/EIS should identify silvicultural management priorities that could guide the implementation of the ASO and identify the management actions that would increase ASO timber stock current levels (page 2-61) and the draft RMP/EIS assumes that reforestation under the PA will use only genetically improved reforestation stock.

The final RMP/EIS should consider timber sale economics as a management concern for analysis in response to the full public disclosure intent of NEPA and in response to the national controversy regarding below-cost timber sales. The final RMP/EIS should provide clear descriptions of key assumptions regarding intensive management practices, interdisciplinary Team costs, sale preparation, timber pricing, product valuation, discount rates, rotation lengths, seed and access costs, and road maintenance.

EPA supports the proposals consistent with adjacent landowners regarding timber management practices, particularly harvest activities. For example, many public agencies and some private companies have adopted guidelines requiring reforestation on adjacent parcels to be of a certain size (e.g., trees 1 1/2 feet tall) or stocking level before adjacent timber sale units may be harvested.

##### ACCESS

The draft RMP/EIS notes that accessors and reciprocal right-of-way agreements provide access to 50% of agency lands (page 3-6). However, if the final RMP/EIS also give an indication of how much access the BLM provides to intermingled landowners through formal license agreements, easements, and reciprocal right-of-way agreements. One of the assumptions used in Chapter 3 in the comparison of the alternatives is "during the expected term or many years life of the plan, one to two miles of new roads would be constructed across BLM-administered lands by private parties under the terms of existing reciprocal right-of-way agreements." (page 4-4). However, the RMP/EIS makes no estimate of the miles of road that might be constructed by private parties.

The RMP/EIS indicates that new "... since harvest roads would be kept to the minimum necessary for management" (page 4-6). Two concerns are raised to the management direction.

First, the draft RMP/EIS calls for the use of an interdisciplinary process to develop the overall transportation system and the establishment of road management

objectives. However, it does not address cooperation with other landowners. The final RMP/EIS should outline how the BLM will coordinate its management with adjacent and intermingled landowners in order to plan, build, and maintain the permanent road system and ecosystem road management objectives. For example, similar to the BLM's authorization for cooperative road programs, the Forest Service Road Right-of-Way Construction and Use Agreement (Cost Share) program is also based on consultation from the Federal Land Policy and Management Act (FLPMA) 1031. The Forest Service program includes requirements for annual meetings with road use partners in order to discuss timber management activities, road use needs, road construction plans and standards (including safety), and maintenance obligations. The final RMP/EIS should clarify whether the BLM road program includes similar coordination methods that assist in accomplishing road management objectives.

Second, the draft RMP/EIS monitors road closures in a number of contexts throughout the document in conjunction with various management objectives. For example, on page 2-34, the document notes that "discuss management, including closure, would be applied to reflect on-site and multiple use needs," and on page 2-62, the RMP/EIS addresses roads and nonmotorist sites and notes that "if... some alternatives involve substantial costs for closure of roads," the term "closed" appears to be used in two ways in the draft RMP/EIS. It can mean either extremely restricted closed (such as means as gates or other barriers) or obliterated (related to the natural land contour and vegetation). Since both economic and environmental costs of the two methods of closure may differ substantially, the final RMP/EIS should clarify which method of closure is appropriate related to specific needs and objectives. In those cases in which the road will remain on the permanent transportation system but in which road use will be restricted by an administrative closure, the final RMP/EIS should address non-timber-generated maintenance needs that will ensure that culverts remain undisturbed and ditches are cleaned in order to prevent road "blow outs" during winter storms. In addition, the RMP/EIS should address road maintenance priorities that can guide decisionmaking when funding is not adequate for complete road system maintenance.

Petrel cut and shakedown systems often require greater road densities than desert systems. In addition, petrel cut and shakedown systems may have higher per acre site preparation costs. Therefore, the final RMP/EIS should further explain how road density objectives will be achieved. For example, the RMP/EIS should clarify whether use of helicopters is an option for accessing and harvesting timber sites. If so, the final RMP/EIS should include a discussion of noise impacts that could be associated with helicopter use, including the noise levels that might be experienced by those who live or recreate in the vicinity. This is important because helicopters at 500 feet are comparable to sound levels of heavy trucks and city buses heard from the street. This could be significant in areas of very low ambient noise levels. One source of information on helicopter noise effects in nonurban areas is the final National Surface Water Survey - Western Wilderness Area Lakes, Environmental

Assessment, EPA 910/9-85-125 and EPA 910/9-85-126, March 1985 and April 1985. (Copies may be borrowed from the EPA, Region 10 library at (206) 850-1259.)

#### WILD AND SCENIC RIVERS

The draft RMP/EIS recommends different numbers of wild and scenic river segments for designation under the various alternatives. Alternatives A, B, and C recommend no river segments. Alternative D recommends one segment as wild. Alternative E recommends 12 as recreational, 1 as scenic and 35 as wild. Alternative F recommends 5 as wild (page xii). These differing recommendations raise a question regarding how river segments are evaluated and recommended for wild and scenic river designation. The differences in the alternatives are in management direction and objectives, the physical qualities of each of the river segments under consideration would seem to be the same under each of the alternatives. Therefore, a river segment is both eligible and suitable for designation, the final RMP/EIS should show it is possible to recommend a given segment in one alternative and not in another.

In addition, not all streams eligible for wild and scenic river designation are studied for suitability in the draft RMP/EIS. The RMP/EIS notes that there will be interim management of BLM land within a half-mile corridor of these streams in order to protect their outstandingly remarkable values (page 2-14). While the text describes some of the elements included in this interim management, such as exclusion of timber harvest in riparian areas and restriction of feasible and select mineral development, it does not give a timeframe for the "interim". The final RMP/EIS should define the expected time during which these streams will be managed under RMP interim management direction and identify when suitability studies and possible recommendations will be made regarding these streams.

In September 1981, Oregon revised its water quality standards to add an antidegradation policy under 304-C-02. The policy defines what will be considered Outstanding Resource Waters (ORW) and sets forth a process for nominating and designating such waters. This process is ongoing. The language in the standards states that "The Commission may specially designate high quality waterbodies to be classified as Outstanding Resource Waters in order to protect the water quality parameters that affect ecological integrity of critical habitat or special water quality values that are vital to the unique character of those waterbodies." Priority water bodies for nomination include Wild and Scenic Rivers. With the potential listing of various stream reaches as threatened or endangered, it can be expected that critical habitat for these species will be designated as ORW. Waters so designated may not have their water quality lowered except on a short-term basis. In addition, and managers will be required to fully participate in the development of management plans to protect those waters.

#### SOCIOECONOMICS

The CED Regulations state that "when an environmental impact statement is prepared and economic or social and natural or physical environmental effects are identified, then the environmental impact statement will discuss all of these effects on the human environment" (Section 1508-14). The proposed action will affect small timber communities in western Oregon, the entire state and the Pacific Northwest region. The draft RMP/EIS has evaluated the environmental consequences of the proposal. EPA is providing comments and suggestions on ways to improve the analysis of the social and economic effects.

The socioeconomic analysis concludes that the reductions in timber harvest associated with the PA would be expected to result in significant reductions in employment and income in the affected area. The Klamath Falls draft RMP/EIS provides a somewhat more complete picture in that it provides an estimate of the statewide effects of the BLM and Forest Service land management alternatives. We recommend that the final RMP/EIS for the Medford District include an analysis similar to that found in the Klamath Falls RMP/EIS. We would also recommend that the analysis be expanded to include more information on other sectors of the economy.

The current analysis appears to be a static analysis; it implicitly assumes that other sectors of the economy do not change over the analysis period and thus shows the potential effects of the BLM and Forest Service activity in total from the point of the economy. The analysis would be substantially more useful if BLM entered as inputs to its input-output model current forecasts of how other sectors of the Oregon economy are expected to change over the next decade. It is entirely possible that the more holistic economic analysis would show that the regional economy is likely to be employing more people over the next decade, jobs lost in the timber industry may be replaced by jobs created in other sectors of the economy.

A secondary benefit of doing the type of expanded analysis suggested above is that it might provide a picture of what types of jobs might become available in the future and what types of job training or vocational training would assist displaced timber workers in finding new long-term employment. This, in turn, would help the final RMP/EIS discuss and evaluate options for Federally sponsored displaced work alternatives that might be used to mitigate the adverse economic effects of the proposed action. Although such assistance may well be outside the scope of the authority of BLM or the Forest Service, it is not outside the scope of the authority of Congress. The CED Regulations encourage evaluation and consideration of alternatives not within the jurisdiction of the lead agency (1508-14(c)).

Finally, the final RMP/EIS could also be improved if the degree to which economic activities on BLM managed lands are likely to be economically

self-supporting was addressed. A qualitative analysis of each "harvest and cost" stream would allow the audience of the RMP/EIS to understand the magnitude of the subsidies involved and to determine whether continuing these subsidies would be good public policy. In addition to timber revenues, this analysis should include such items as grazing fees and mineral royalties.

#### CONSISTENCY AND COORDINATION

While Table 4-C-4-1, Consistency of the Proposed Action... discusses agency efforts to work with state agencies and counties on ways to make the RMP consistent with plans, policies, and programs of other agencies, the RMP/EIS does not discuss what effort was made regarding National Forest Land Management Plans for adjacent Forest Service lands. If other federal lands are key to the success of an alternative, the final RMP/EIS should clearly outline what types of coordination and cooperation will be a part of plan implementation.

Another concern arises regarding the Table 4-C-4-1 for Big Game Population Management Objectives. Under all alternatives cover on BLM lands is expected to decrease. However, in other parts of the RMP/EIS specifically exclude private lands from consideration because of jurisdictional differences, but in this case, the BLM appears to be using private land as a mitigation vehicle or buffer for the agency's activities. It is important to show a consistent approach regarding adjacent private landowners.

#### FUNDING

We are concerned that the preferred alternative and alternative C will be costlier to implement since they both contain more nonrecreational timber management approaches. The draft RMP/EIS indicates that for these two alternatives the costs of nonrecreational timber management would be approximately 24 times higher per unit of timber sold than for the more traditional timber management alternatives.

The final RMP/EIS needs to describe in greater detail how BLM funding levels are established each year; whether allocations are based solely on the amount of timber cut, whether each yearly allocation is "year reserved" for specific uses; and what effect this more costly nonrecreational timber management will have on the funds available for a variety of nonrecreational activities. Management of BLM administered lands involves a variety of activities including data gathering, research, monitoring, cooperation with agencies for management of resident wildlife, completion of management/activity plans, maintenance of recreation facilities and other programs. The final RMP/EIS needs to describe in greater detail how a funding shortfall will affect the variety of activities included in this plan. Will all activities be cut

back equally if funding is not sufficient? Do some management activities have a higher priority for completion than others? Will all resources be equally or adequately protected if funding is less than anticipated or needed?

#### TIERING AND NEPA COMPLIANCE

The CLEQ regulations encourage tiering of NEPA documents.

Agencies are encouraged to seek their environmental impact statements to eliminate repetitive discussions of the same issue and to focus on the actual issues ripe for decision at each level of environmental review (3160R.26). Whenever a broad environmental impact statement has been prepared (such as a program or policy statement) and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or policy (such as a site-specific action) the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action. (40 CFR 1502.90)

While programmatic documents, such as RMPs, provide important management direction, they do not contain sufficient site-specific detail to substitute for site-specific analysis for individual projects implemented under RMP direction. For example, in the draft RMP/EIS, under all alternatives, "...cumulative prescribed burning on all lands including BLM land under any alternative would cause no deterioration of ambient air quality standards." (page 4-8). While the programmatic RMP partially addresses potential air quality impacts in the region, this level analysis should not be used as the basis for concluding that future site-specific prescribed burning proposals will have no effect on local sensitive air quality areas or RIAs.

The draft RMP/EIS implies that there may be a second level of planning activity between the RMP level and the individual project level. For example, the draft RMP/EIS on page 2-61 identifies possible future "activity level plans" including habitat, riparian, vernalwetland, stress of critical environmental concern management plans or a combined activity plan to address a number of resources in the same area. What analysis will these activity level plans will include in excess of the RMP/EIS? Can these analyses be included in the first RMP/EIS? What events would trigger the preparation of these activity level plans? Are there examples of activity level plans that have been completed?

If activity level planning is another decision-making point in BLM activity scheduling, such decisions are subject to the provisions of NEPA, as are individual project decisions, such as new land use authorizations, timber sales, land

adjustments, mining activities, and consideration of silvicultural treatments (including site preparation and prescribed burning proposals).

Further, the final RMP/EIS should provide specific direction regarding the preparation of tiered NEPA documents. The draft RMP/EIS refers a number of times to future tiered environmental assessments (EAs), but this should not be construed as a directive to prepare solely EAs for individual projects. In some cases, EISs or categorical exclusions (CEs) will be more expeditious. Therefore, the final RMP/EIS should identify the criteria for determining what sort of NEPA documentation will be required for future projects (EIS vs. EA vs. CE). In addition, it should provide guidance for the scope of analyses expected in these tiered documents to clarify what analyses and issues are considered comprehensively addressed in the RMP/EIS, and what analyses and issues should be further considered based on site-specific resources and conditions.

#### Effect-Level Definitions

Table 2-2 Definitions Used in Effect Assessment				
Effect-Level Definitions				
VERY LOW	LOW	MODERATE	HIGH	VERY HIGH

##### Resource Context

###### Value Quality

<p>A regional assessment is completed that the value, quality, and quantity of resources are assessed. The assessment is completed at a level that is consistent with the scope of the project.</p>	<p>A regional assessment is completed that the value, quality, and quantity of resources are assessed. The assessment is completed at a level that is consistent with the scope of the project.</p>	<p>A regional assessment is completed that the value, quality, and quantity of resources are assessed. The assessment is completed at a level that is consistent with the scope of the project.</p>	<p>A regional assessment is completed that the value, quality, and quantity of resources are assessed. The assessment is completed at a level that is consistent with the scope of the project.</p>	<p>A regional assessment is completed that the value, quality, and quantity of resources are assessed. The assessment is completed at a level that is consistent with the scope of the project.</p>
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##### Biological Resources

<p>A project or program of project design is shown. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>A project or program of project design is shown. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>A project or program of project design is shown. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>A project or program of project design is shown. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>A project or program of project design is shown. The project or program is shown at a level that is consistent with the scope of the project.</p>
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##### Uniqueness or Outstanding Features

<p>No distinctive, prehistoric, or historic features are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>No distinctive, prehistoric, or historic features are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>No distinctive, prehistoric, or historic features are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>No distinctive, prehistoric, or historic features are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>No distinctive, prehistoric, or historic features are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>
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##### Range of the North

<p>Resource effects are not measured. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Resource effects are not measured. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Resource effects are not measured. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Resource effects are not measured. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Resource effects are not measured. The project or program is shown at a level that is consistent with the scope of the project.</p>
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#### Effect-Level Definitions

Table 2-3 (Continued) Definitions Used in Effect Assessment				
VERY LOW	LOW	MODERATE	HIGH	VERY HIGH

##### Resource Context

###### Subsistence Species

<p>Problems of subsistence species are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Problems of subsistence species are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Problems of subsistence species are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Problems of subsistence species are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Problems of subsistence species are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>
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##### Subsistence-Related Patterns

<p>Subsistence resources are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Subsistence resources are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Subsistence resources are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Subsistence resources are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Subsistence resources are identified. The project or program is shown at a level that is consistent with the scope of the project.</p>
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##### At-Oakley?

<p>Resource context is identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Resource context is identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Resource context is identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Resource context is identified. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Resource context is identified. The project or program is shown at a level that is consistent with the scope of the project.</p>
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##### Anthropogenic Resources

<p>Resource effects are not measured. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Resource effects are not measured. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Resource effects are not measured. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Resource effects are not measured. The project or program is shown at a level that is consistent with the scope of the project.</p>	<p>Resource effects are not measured. The project or program is shown at a level that is consistent with the scope of the project.</p>
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Continued

Table 5-1 (Continued) Performance Measures to Assess Assessment				
Effect and Consequence				
VERY LOW	LOW	MODERATE	HIGH	VERY HIGH

## Resource Category

Land Use Pattern and  
Resource Management  
Program

Activities generally continue with existing land use, but some activities may be modified or eliminated. Land use pattern is generally stable and land use is generally stable.	Activities continue on existing land use, but some activities may be modified or eliminated. Land use pattern is generally stable and land use is generally stable.	Activities continue on existing land use, but some activities may be modified or eliminated. Land use pattern is generally stable and land use is generally stable.	Activities continue on existing land use, but some activities may be modified or eliminated. Land use pattern is generally stable and land use is generally stable.	Activities continue on existing land use, but some activities may be modified or eliminated. Land use pattern is generally stable and land use is generally stable.
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Source: USEPA, NPS, and other agencies.

1. LOCAL-Change in water quality from one or more sources, including beyond the edge of a riparian area (200 m or less), but affecting less than 100 km of the river.
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## FUNCTIONS AND VALUES

Healthy riparian areas are critical to environmental quality. Their presence increases landscape and species diversity and productivity. Continuous interactions occur between riparian areas, aquifers, and terrestrial ecosystems through exchanges of energy, nutrients, and movement of plant and animal species. Specific functions resulting from these interactions vary considerably from area to area. Their value is relative to these functions, and the potential that they have to carry out these functions. Some of the functions include:

- Water quality protection and improvement
- Habitat for aquatic and terrestrial life
- Improved channel and bank stability
- Flood storage and detention/detention
- Groundwater recharge and discharge
- Sources of primary production (oxygen) for streams
- Aesthetics

## RIPARIAN MANAGEMENT POLICY

## Review of Section 319 Projects and Programs

EPA considers the protection, improvement, and restoration of riparian areas and the abatement of NPS pollution affecting riparian areas as a high priority for funding through Section 319 of the Clean Water Act. EPA will expect to see riparian areas addressed in all watershed improvement grant proposals. Attention will be focused on the condition of the riparian areas and the expected impact on riparian areas by treatment in the entire watershed.

## Review of NEPA Documents and Natural Resource Management Plans

EPA will expect riparian areas to be addressed in environmental impact statements and program or project plans. EPA will consider functions and values in assessing riparian area project impacts. EPA will actively promote alternatives which reduce or minimize adverse environmental impacts to riparian areas. Recommended alternatives should protect, restore, or improve riparian area functions and values.

## Protection of Designated Water Uses

EPA recognizes that healthy riparian areas are valuable and critical to the protection of designated water uses and meeting Surface Water Quality Standards. EPA expects States and their Designated Management Agencies to recognize riparian functions and include degraded riparian areas when assessing water use impairments.

2

U.S. Environmental Protection Agency - Region 10  
Riparian Area Management Policy

## PURPOSE AND SCOPE

This document establishes Region 10 EPA policy on the management of riparian areas, primarily those affected by nonpoint source (NPS) activities. EPA recognizes that riparian areas serve many important functions and possess numerous values. Including a major role in maintenance of the quality of the Nation's waters. The national intent of Congress to protect and improve the Nation's waters is established in the Clean Water Act. Riparian areas can provide many uses, such as recreation, forage, and timber. EPA recognizes that riparian areas can be used for these and other activities if management practices are implemented that protect or restore natural functions.

## This policy will:

- 1) Alert local, state, and federal land managers, owners, and users to EPA's concerns in the riparian area planning and management process
- 2) Assist the states in Region 10 with the implementation of riparian area protection or improvement in their management programs
- 3) Provide guidance to Region 10 personnel in the execution of EPA's responsibilities under the National Environmental Policy Act (NEPA), the Clean Air Act, and the Clean Water Act.

## DEFINITION

Riparian areas are zones that influence and are strongly influenced by an adjacent aquatic environment. They occur in complete ecosystems or as an ecotone between aquatic and terrestrial ecosystems, but have distinct vegetation and soil characteristics because of seasonally free and unbound soil moisture. These areas are associated with rivers, lakes, reservoirs, and intermittent, or perennial streams. They may also be adjacent to bays, seeps, wetlands, and ephemeral streams.

Topographic relief and presence of depositional soils most strongly influence the extent of water regimes and associated riparian zones. Thus, the boundary of a riparian area varies from site to site and must be determined for each specific location. Some riparian areas are defined as wetlands. Others are not, because they do not possess the necessary hydrologic water regime, a predominance of hydro soils, or a prevalence of hydrophytic vegetation as described in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands.

## LEGAL AUTHORITIES

- Clean Water Act (33 U.S.C. 468 et seq.) Section 101 (a):

"The objective of this chapter is to restore and maintain the chemical, physical and biological integrity of the Nation's waters."

(7) It is the national policy that programs for the control of NPS of pollution be developed and implemented in an expeditious manner so as to realize the goals of this Act to be met through the control of both point and nonpoint sources of pollution."

- National Environmental Policy Act (42 U.S.C. 4321 et seq.) states in part:

"The Congress authorizes and directs that, to the fullest extent possible, all agencies of the Federal Government shall, identify and develop methods and procedures, which will ensure that presently unquantified environmental amenities and values may be given approximate consideration in the decision-making along with economic and technical considerations."

- Clean Air Act (Section 309) (42 U.S.C. 7509, Public Law 91-604 §126), 84 Stat. 1709 requires:

the EPA to review and comment in writing on the environmental impact of any action relating to the action and responsibilities granted pursuant to the Act or other provisions of the authority of the Administrator, combined in any: (1) legislation proposed by a Federal department or agency; (2) newly authorized Federal project for construction and any major Federal action, or action, other than a project for construction, to which Section 102(b)(2) of Public Law 91-190 applies; and (3) proposed regulations published by any department or agency of the Federal Government.

*Greg A. Rasmussen*  
Greg A. Rasmussen  
Regional Administrator  
EPA, Region 10

3-12-91  
Date

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### Monitoring of Riparian Areas

EPA believes riparian area monitoring should be a high priority for any NPS management program. Monitoring is critical for land managers to evaluate their success in meeting their objectives for improving and protecting riparian areas and water quality. When monitoring results indicate violations or other problems, adjustments can be made to the practices implemented on the riparian area and the entire watershed (feedback loop). EPA will actively promote environments monitoring at a level consistent with the condition of the riparian area and the sensitivity of the designated water uses.

### Public Education and Involvement in Riparian Areas

EPA will use reviews of Section 319 grant proposals, NEPA documents, program end of project plans, conferences, prepared presentations, information exchanges, and distribution of written materials to increase the awareness of and responsibility for healthy riparian areas. EPA will also encourage and support efforts that directly involve people in local activities to protect, improve, and restore healthy riparian areas. The goal of these actions is to have a motivated, educated public who understand the value of and critical need for healthy riparian areas.

### Site-Specific Prescriptions

EPA will encourage and support innovative solutions to site specific problems in riparian management.

U.S. Environmental Protection Agency, Office of Water  
Washington, D.C. 20460  
Re: Riparian Areas and the Clean Water Act

### Environmental Issues of the Act

#### 1. - Lack of Information

The Environmental Protection Agency (EPA) has not identified any potential environmental issues requiring substantive changes to the program. The review has also identified opportunities for additional or alternative measures that could be incorporated into the program to enhance the protection of riparian areas.

#### 2. - Environmental Concerns

The EPA review has identified environmental issues that should be resolved in order to fulfill the intent of the Act. Specific measures are required changes to the program to enhance the protection of riparian areas that are not within the scope of the program.

#### 3. - Environmental Objectives

The EPA review has identified significant environmental issues that should be resolved in order to protect riparian areas and the environment. Specific measures are required changes to the program to enhance the protection of riparian areas that are not within the scope of the program.

#### 4. - Environmental Monitoring

The EPA review has identified environmental issues that should be resolved in order to protect riparian areas and the environment. Specific measures are required changes to the program to enhance the protection of riparian areas that are not within the scope of the program.

### Attachment of the Draft Document

#### Chapter 1 - Introduction

The draft document has been reviewed and the environmental impacts of the program have been identified. The review has also identified opportunities for additional or alternative measures that could be incorporated into the program to enhance the protection of riparian areas.

#### Chapter 2 - Environmental Objectives

The draft document has been reviewed and the environmental impacts of the program have been identified. The review has also identified opportunities for additional or alternative measures that could be incorporated into the program to enhance the protection of riparian areas.

#### Chapter 3 - Environmental Monitoring

The draft document has been reviewed and the environmental impacts of the program have been identified. The review has also identified opportunities for additional or alternative measures that could be incorporated into the program to enhance the protection of riparian areas.

The draft document has been reviewed and the environmental impacts of the program have been identified. The review has also identified opportunities for additional or alternative measures that could be incorporated into the program to enhance the protection of riparian areas.

United States Forest Service Pacific Forestry Research Laboratory  
Bureau of Land Management 3003 N.W. Jefferson Way  
Hedberg, OR 97109

Reply To: 1000-1

Date: December 21, 1992

Deva Jones, District Manager  
Bureau of Land Management  
3003 Hedberg Road  
Hedberg, OR 97109

Dear Mr. Jones:

I have recently gone through the Draft Resource Management Plan for the Hedberg District of the Bureau of Land Management and have some comments to make in regards to the plan. I was very pleased to see the number of new RMA proposals in the plan. Dick Vander Schaaf of the Hedberg Conservancy, myself, and your district staff have put a lot of time and effort in these proposals and it is gratifying to see so many of them come to fruition.

I have a few specific and some more general comments to make. Specifically, Table 2-12 states that the public in Hedberg District RMA are open to OPA and that the public in the Hedberg District are not open to OPA use. This is, of course, inconsistent. No roads within an RMA should be open to OPA use. The same table should state no grazing and no timber harvesting at Hedberg District RMA. Finally, in Appendix D it would be helpful under the Riparian Area/ROA proposal to include some comments about working with the Forest Service on their portion of the drainage, in order to get the whole area established as an RMA.

In a more general nature the issue of recreation use is not addressed adequately in the plan. There is real potential here for future conflicts involving use of public lands, hunting, wildlife rehabilitation projects, etc. The plan does not necessarily prohibit these things, but to give some kind of guidance in order to prevent unnecessary damage to the area and their potential for future recreation. Also the issue of adjacent land management to RMA and its effect on what goes on outside the RMA is of importance. I would be glad to provide any help I could in resolving such language for the final plan, if you would like.

Finally, last summer I visited the Hedberg Creek area with Bob Harbison, District Manager, and Lauren Mittenberg. We were unable to see much of the area in one day, but we did drive around and look at it from various vantage points, and walked down into and along the creek for a while. The area, which is a proposed RMA in the plan, has serious potential for a RMA. We agreed that a future visit should be made in the spring of 1993 and more time spent actually traversing the forests and streams. I suggested we bring along Tom Alant, area ecologist for the Hedberg, Riparian, and Hedberg National Forests, to be as very

familiar with the country and the various plant associations that exist there. We also thought it would be wise to include Rick Harbison, Forest Service District Scientist and Bob Lewis, District Silviculturist. I will get together with Bob and Tom to organize this trip in the spring. Meanwhile, I support it as an AGC proposal and think the potential for a RMA designation is good.

If you should have any questions regarding my comments please do not hesitate to get in touch with me.

Sincerely,

*Frank Jensen*

FRANK E. JENSEN  
Assistant Natural Areas Scientist  
Pacific Northwest Region

cc: C. McElroy  
J. Seavore  
K. Harbison





United States  
Department of  
Agriculture

Forest  
Service

Pacific  
Northwest  
Region

P.O. Box 3423  
Portland, OR 97208-1423  
331 S.W. First Avenue  
Portland, OR 97204

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ENCLOSURE

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COMMENTS FROM THE U.S.D.A. FOREST SERVICE, REGION 4  
OF THE U.S. BUREAU OF LAND MANAGEMENT  
WESTERN FOREST PLANT RESOURCE MANAGEMENT PLANS  
AND ENVIRONMENTAL IMPACT STATEMENTS

December 21, 1992

Reply To: 1992

Date: December 21, 1992

Mr. D. Ivan Dillies  
State Director  
Bureau of Land Management  
P.O. Box 2215  
Portland, OR 97208

Dear Mr. Dillies:

I appreciate the opportunity to review and comment on the six draft Resource Management Plans/Environmental Impact Statements you recently sent out for public comment. I have attempted to coordinate and consolidate the reviews of the documents sent by Forest Supervisors and by this office the enclosed papers and letters constituted my response to the draft documents.

Overall, I am impressed with the depth and thoroughness of the draft plans; your staff and all those involved are to be commended. However, I do have some concerns about how the draft Resource Management Plans deal with the northern spotted owl. The draft Resource Management Plans propose to adopt a different approach for management of the northern spotted owl than either the 1992 strategy or the draft Recovery Plan. Because of this we suggest to have to be consistent with a new alternative in our Supplement to the FEIS on Management for the northern spotted owl.

I believe either the 1992 strategy or the draft Recovery Plan provides a common basis for cooperation in meeting spotted owl recovery needs and achieving our agency land management goals and objectives. As you develop your final plans, I recommend that we work together to develop plans that will be compatible with the Recovery Plan developed by the Plan and Wildlife Service, and thus avoid differences of impacts between our agencies that could result in less than optimum results for both spotted owl recovery and effective management of public lands.

Sincerely,

*John D. Dillies*  
John D. Dillies  
Regional Director

Enclosure

Control Your Land and Saving People  
From the National Trust

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# 1. Northern Spotted Owl

## Comments:

The RMP should be amended for the major shift toward a more multiple-use management emphasis.

We wish to thank those staff employees who helped us with information during our review. In every case, that assistance helped us understand our role and the review being offered to the spotted owl.

We appreciate our continued RMP for their continued support and conduct of owl-related research, both within the RMP and independently with others including the Forest Service.

## Background:

In January 1992 the Forest Service completed a Final Environmental Impact Statement (FEIS) with a preferred alternative to manage according to the 1992 Strategy. The FEIS contained a spotted owl viability assessment for each of the five alternatives analyzed. A primary element of that assessment was the assumption that the RMP would "... manage their lands with a level of spotted owl protection similar to that of the 1992 Strategy" (FEIS 344-40). The Supplement to the FEIS now being prepared will use a viability assessment based upon the assumption that the RMP will manage according to the Preferred Alternative in the draft Resource Management Plans (RMPs). As a result, a modification of the Preferred Alternative will likely be necessary.

We have compared the Preferred Alternative for the Drafts 1992 with the 1992 Strategy. Relative to the 1992 Strategy, the Draft RMP:

- Result in 42,000 ac of present forest area of owl habitat at year 10 and 71,000 forest acres at year 50. Similarly, there is a 4-percent reduction in old growth after 10 years, a 6-percent reduction in old growth after 100 years, and a 4-percent reduction in "habitat of habitat" in 10 years.
- Do not protect home-range size areas (Category III RMP) for all currently known and future pairs of spotted owls in the Oregon Coast Range Area of Concern.
- Do not adopt the 50-11-40 rule but instead describe management that will delay for 40-50 years, the development of forest stand conditions which meet the dispersal standards set forth in the 1992 Strategy. This results in 355 fewer quarter crownings meeting the 50-11-40 rule at years 30-40, and:
- Schedule timber harvest on 141,000 acres within RMPs. The scenario put forth for the silvicultural treatment of suitable habitat for the northern spotted owl over a number of decades is presented as if the outcome is certain. Some enhancement of the risk should be included. It is uncertain whether biologists can adequately describe owl habitat, whether prescriptions can be written to enhance their habitat, whether such prescriptions can be successfully implemented, whether monitoring will be designed and implemented that will measure success of the implementation.

and whether monitoring will result in appropriate adjustments to treatments.

## Viability Rating and Mitigation:

It appears that these differences will affect the viability of the northern spotted owl on the National Forests. The 1992 "... reported that the owl is imperiled over significant portions of its range..." and "... in some portions of the owl's range, few options for managing habitat remain open..." (FEIS page 1). The FEIS also reported that "the situation for dispersal habitat on owl lands is not good and getting rapidly worse. We consider the RMP lands to the west likely in the proposed strategy..." (Quoted in A Conservation Strategy, ... question 44). Thus, because of the breakup of natural dispersal patterns and the resultant risk of isolation of the coastal range, substantial corrective actions in order to manage long-term viability on National Forests may be required. If so, mitigation would likely focus on compensating the loss of RMPs on the Siuslaw National Forest and at critical links between physiographic provinces to increase the future population of spotted owls in order to increase probabilities of successful movement of owls among physiographic provinces.

## Recommendation:

The Forest Service and RMP are currently working on RMP's that include management strategies for the northern spotted owl. We recommend (1) that the RMP adopt a strategy for managing the northern spotted owl which is consistent with the 1992 Strategy and/or the Recovery Plan, and (2) that strategy be incorporated into the Resource Management Plan.

## 7. RPA-Related Comments

Since all of the RPA's/RP's are similar, comments apply to all of the documents.

A. Documents seem to be well written, easy to understand, and have all of the parts mandated by the CRZ regulations for implementing RPA. (40 CFR 1507-1508). They also make good use of maps, charts, graphs, and pictures.

B. Documents are set up to make a wide variety of decisions, such as the Forest Service did during the first round of Forest Plan development. With a purpose and need of providing a "... comprehensive framework for allocating and managing the natural resources in the area within the principles of multiple use and sustained resource yield." (National Forest Resource Act and RPA), the RPA is forced to look at a broad list of issues and a broad range of alternatives. They then have to build on previous planning efforts and narrow the steps of this analysis to the "things that need changing." They may have had a much less cumbersome planning process.

C. The documents never spell out clearly what decisions will be made as a result of this analysis. As a client, it appears that decisions are being made about management direction for a variety of resources, land allocations are to be made, some of critical environmental concerns are being selected, and possibly some recommendations are to be made regarding wild and domestic fire vulnerability but a reader must really strain to figure these things out.

D. The RPA's discuss effects on global climate. We have taken the approach to state that this is outside the scope of our analyses and that there is too little information available to provide a reasonable estimate of effects.

## 3. Timber Modeling and AGD Calculation (Sales Director Draft Resource Management Plan)

The methods used to model timber are described in Chapter 2 and Appendices 3-A to 3-D. In general, these sections are well organized, clear, and concise. The methodology for estimating uncertain yield, projecting future yields, and assigning timber harvest methods and individualized treatments for a given alternative appear logical and sound. The explanation and rationale for the generic "tree improvement" program is written in terms that the general public should understand.

Appendix 3-D describes the Best Management Practices and the classification system used to identify unsuitable and restricted growth. The recommended practices for each classified area are also clearly explained. There is no table showing the acreage within each land classification, however. This table would help the reader determine the significance of these restricted areas.

## 4. Forest Pest Management

## A. GENERAL COMMENTS

1) We are impressed with the change in emphasis for RPA management that these Resource Management Plans indicate. In general, the plans appear to be genuine first efforts to develop thinking approaching a sustainable ecosystem management priority. They certainly do not represent "business as usual."

2) The documents are quite well organized and obviously represent a great deal of work.

3) In our opinion, the practice of defining a program or concept at the beginning of the documents and subsequently using an acronym or only the initials of this program or concept is confusing, misleading, obscure, and extremely annoying. It would be much better to avoid these kinds of acronyms altogether. One of the fairly specific out-words would make the documents much more readable.

4) The documents need editing. In particular, the spelling of scientific names should be checked thoroughly. For example *Phallus* is the genus of the most important forest pathogen in western Oregon, is spelled "*Phallus*" several times in the Astoria-Burnett Forest Plan. Also, references need to be checked. Some that appear in the text are not listed in the respective References listed sections.

## B. SPECIFIC COMMENTS RELATIVE TO FOREST/INSECT/PATHOGEN DISEASE MANAGEMENT

1) When referring to competing vegetation management, all Resource Management Plans are cited to the RPA's 1510 FTS. National System Management of Competitive Vegetation. Nothing weed references are listed to the 1510 Supplement, and found in Section 10 to the 1510 FTS, Supplemental Management Control. This appears to be a reasonable approach, and we believe that the documents to which they are being cited are of good quality.

2) In our opinion, none of the Resource Management Plans adequately addresses insect and disease concerns. Coverage is superficial and vague, and the plans, as written, strongly imply that insects and diseases are not important. We are particularly concerned about the following points:

a) Insects and diseases are not mentioned in any cases or concerns. Forest health is mentioned primarily in terms of the insect and disease components are, for the most part, ignored. Including conditions of insects and diseases in management areas are not addressed or are superficially addressed (with the exception of the Klamath Falls Resource Area Plan), and quantitative data (which are available) are not included. Monitoring of insects and diseases effects will be impossible since there is no base line for comparison. Little or no effort is made to protect effects of new management practices or future

The harvest scheduling and AGD calculations for this RPA Plan are based on a premise that the Non-Declining-Yield constraint limits harvest for the first decade. Given the increasing concerns over threatened and endangered species, watershed protection, and other cumulative effects, this premise may be far from realistic. In the Klamath Falls Resource Area, the first-decade harvest acreage is most limited by the requirement that no more than 10% of the forest land in the first few years the available timber management acreage has declined, with the removal from the base of relatively undisturbed areas (e.g., spotted owl RPA's, etc.). The areas that remain in the base are generally heavily impacted by logging and other human activities, and are therefore at sustained-yield levels. On RPA plans, which are often interrelated with private ownership, these short-term harvest limitations may be as severe.

The alternative D only, a data base model was used to ensure that the 10-11-12 requirement for spotted owl was met. We recommend that you expand this model to include other "cumulative effects" factors which may limit your harvest level in the coming decade. This model would calculate the allowable harvest acreage for each relevant resource of the Klamath Falls Resource Area and be used in conjunction with the TSP-RPA model. Alternatively, a short-term linear programming model (LP/SPAR or SARA) could be used to determine the potential harvest acreage by resource and type in the first few decades of the plan.

Insect and disease impacts. Some of the proposed management changes will affect insects and pathogens populations profoundly.

We believe that significant insects and pathogens should receive treatment as important concerns or planned considerations under at least the "timber production practices" areas listed in all the plans. Specifically, limited root rot and Douglas fir beetle should receive coverage in western RPA plans (where they presently receive only brief mention). Pine bark beetles, dwarf mistletoes, Armillaria root disease, and annular root disease should be addressed in the Klamath Falls Resource Area plan. They are discussed in the draft but should be addressed in such greater detail.

b) Many of the plans refer to insects and diseases as "natural components" of the ecosystem and seem to imply that, under that reasoning, there is little need to consider their management. While it is true that insects and pathogens are natural ecosystem components, so are fires, vegetation loss, and severe weather. Animals that consume trees, heavily stocked stands, etc. We suggest that insects and pathogens are "agents of change" that should concern the forest manager just as much as those other forces that managers traditionally attempt to influence. These certainly will be more where active management of insects and diseases will not be desirable but, in such cases, a competent manager should know the consequences of the action alternative. As the plans now stand, this will not be the case.

c) The plans repeatedly indicate that control methods will be applied to insects and diseases if large outbreaks develop. We believe this is a poor way to manage insects and diseases. The preferred method of managing populations of insects and pathogens is to use a prevention approach with the goal of never allowing epidemics to develop. Integrated pest management techniques, including individualized manipulation of stands to prevent the development of conditions favorable for damaging population increases, is our preferred method.

d) The plans address the need to practice very intensive forestry on areas being managed primarily for timber production objectives. This, in a way, is a poor way to manage insects and diseases. The preferred method of managing populations of insects and pathogens is to use a prevention approach with the goal of never allowing epidemics to develop. Integrated pest management techniques, including individualized manipulation of stands to prevent the development of conditions favorable for damaging population increases, is our preferred method.

e) Effects of insects and diseases on management objectives other than timber production are hardly mentioned at all. As the very least, the potential impacts of insects and diseases on these objectives should be outlined and estimated.

f) These documents do not contain an accepted definition of "forest health." We consider a desired state of forest health is a condition where biotic and abiotic influences (i.e., insects,

diseases, atmospheric deposition, fire, silvicultural treatments, harvesting practices) do not threaten resource sustainability and attainment of management objectives for a given forest only now or in the future. Other definitions exist. All the RMP plans prior to 1990 and the Forest Service have used this definition. However, most of the plans do not indicate how the rate is defined. Several of the plans suggest that various activities (such as retaining a certain number of trees following a harvest, for example) will cause forest health. In most of the plans are now written, there is no way to judge whether such statements have any meaning. We suggest a simple, unambiguous definition be adopted and used in all the plans.

## 5. Rural Interface

United States Forest Service  
Department of Agriculture

Reply to: RMP Draft Plans

Date: 12/14/92

Subject: Rural Interface

To: Director, Land Management Planning

The purpose of these comments is to aid in the responses by the Forest Service to the Bureau of Land Management Draft Resource Management Plans for the State of Oregon.

The Bureau of Land Management Draft Plans for each of the districts in Oregon are listed in the attached district plan management plan on the issue of rural interface. Rural interface is defined as the interface between the decisions of federal and state agencies in formulating land management goals. Theory from the draft management plans on rural interface states that if a change in the social values for an area occur, "traditional activities" will be curtailed or have a greater cost. Consequently, there are changing social values. The overall increase in population is a primary factor. This increase is coupled with a shift in the rural portions of states from these families that earned a living directly from the land to the families that choose to reside in the rural setting without it as economically to the land base. Taken together, the social value system for rural areas has shifted.

The differences between the Forest Service and the Bureau of Land Management on the issue are reflective of the vision for each agency. Central to the Forest Service vision is the focus on the people element and the role they play in land management. Programs for the Forest Service emerge through the continuation of human interaction within ecosystems that begin in the urban environment and grade outward to the low level of interaction found in the wilderness. Because of these program elements, the Forest Service disagrees with the analysis on rural interface and the decisions in land allocations that are based on that analysis.

## Analysis Methods

The analysis is based on the premise that conflict between the agency and the public is directly related to distance of management activities from residences. Potential list size along with the distance from the property boundaries is then used to develop the degree of potential conflict to land management activities.

This is too simple to reflect the complicated interactions within the Rural Interface. As stated in the document (D-3-18), counties efforts at coming large lot size have been unsuccessful in facilitating public land management activities. Conflict still occurs regardless of distance. Public involvement, type of activities, history of relationships, and timing of activities also play a role in estimating the degree of conflict.

Landowner surveys within the Non-Industrial Private Forest (NIPF) ownership group, recently completed by biologists and Oregon, indicated the land which of these individuals is high. Forest Service programs focused at enhancing good land ownership by the landowner has had good response. Data regarding timber supply and value of ownership indicate that this landowner group has a willingness to manage their lands for commodities. These results are not consistent with the distance/conflict theory of the Bureau of Land Management.

## Conflict Avoidance through Buffering

The conclusion from the analysis is that if federal lands are buffered with minimum management prescriptions, conflicts with local landowners will be minimized. Given the heated debate on the millions of federal lands land management agencies, this is not a likely result. It would be more appropriate to consider a direction in dealing with conflicts which states that conflicts will occur and that a project success will be based on proper planning, building a public involvement process that gains consensus on the objective, and clearly defining the decision space for the manager.

## Direction to Counties on Priority Lands

The State of Oregon has given new direction to the counties mandating that they designate the boundary forest plan by the year 1995. This will reduce the number of potential respondents. Any allocations by the Bureau of Land Management should be reflective of this change.

## Forest Service Objectives

Forest Service objectives in regards to the Rural Interface are to implement the policy given by Congress to work through and in cooperation with State Foresters in implementing Federal programs affecting non-Federal forest lands. It is important to the Forest Service role to operate the programs affecting non-Federal lands within the regulatory framework of States and local government. The Forest Service will provide assistance to develop multiple-resource forest management plans that meet landowner objectives and provide sound stewardship of all natural resources. Progress such as rural development will help look at forming our future land management decisions. On the national Forest, decisions for Special Use Forest will consider local government direction to avoid unnecessary controversies.

## 6. Comments from the Siskiyou and Rogue River National Forests (Hefford District Plan)

United States Forest Service  
Department of Agriculture

Reply to: 1992/1993

Date: November 15, 1992

Subject: Hefford RMP Plan

To: Regional Forester, R-6

Here is the combined Siskiyou and Rogue River National Forest response to the proposed Hefford RMP District plan.

The Hefford District has done a fine job of planning. Specific items which warrant comments are:

- The water quality, stream coverage, and riparian wetland objectives are consistent with those of the National Forests. The water-shed deferred from timber harvest due to potential cumulative effects are also consistent with Forest Service objectives.
- Coordination between the Siskiyou National Forest, Rogue River National Forest, and Hefford RMP districts will continue to be essential for achieving planning objectives associated with soil growth and secure forest habitat, connectivity areas, Research Natural Areas, and threatened and endangered species habitat. Activity within the old growth emphasis areas will need coordination with the Fish and Wildlife Service and their Final Recovery Plan for the northern spotted owl, and the National Forest regional plan for the northern spotted owl to ensure informed decisions. Both projects will continue to research the RMP that to low level consideration in these areas is ongoing before the RMP Plan is finalized.

The emphasis items for ecological management and forest health in the areas proposed for timber harvest are to be completed. The type of management proposed on the Southern District Forest Management Area, the leave trees on the Southern District Forest Management Area, and management, and large scale material management will provide a healthier ecosystem for the entire area.

We think that the ecosystem connection between the Siskiyou and Cascade mountains is essential to consider. It appears that the management schemes on RMP lands in that area are appropriate to protect this connection/pattern pathway although they do not identify this connection specifically as being important.

We have noted only one significant inconsistency between National Forest land allocations and different RMP management. The Rogue River RMP has identified water range along the western portion of Butte Falls Canyon. District and the southwestern portion of Prospect Range District. RMP has identified significant amounts of big game winter range on their District and outlined this obvious area adjacent to Butte Falls and Prospect Districts.

In relation to the Rogue River National Forest 1992, the local chapter of the Ruckelshaus RMP's Association appealed. The RMP has been working with

this group since that time as well as some representatives of Redford RNM and Siskiyou R.F. Through a lot of effort from the Redford RNM and Siskiyou R.F., we are an increasing modification between the Redford RNM and Siskiyou R.F. and agencies to plan on a valley wide basis. The Redford RNM plan once out of the ground will not be met with the previous plan. The Redford RNM plan could better reflect the need to respond to this use. In any case, we look forward to coordinating actions and Travel Management with RNM, other land owners, and users across the Rogue Valley.

We applied the significant efforts RNM has made to address ecosystem management and believe the state-wide coordination they have done is necessary as we proceed with our planning efforts. The Redford RNM plan reflects significant thinking and energy toward ecosystem management and we should please what we can from that fine job. Some of the data displays also were well done and worth taking note.

We look forward to coordinating any future decisions as our dynamic forest planning process and the RNM process continue.

/s/ Abel M. Chaverra For

/s/ James T. Gladen

J. MICHAEL LIND  
Forest Supervisor  
Siskiyou National Forest

JAMES T. GLADEN  
Forest Supervisor  
Rogue River National Forest

# 7. Comments from the Siskiyou National Forest (Cone Bay District Plan)

United States Department of Agriculture	Forest Service	Siskiyou National Forest	Rogue River National Forest
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Reply to: 1002/1020

Date: November 23, 1992

Subject: Cone Bay District RNM Resource Management Plan

To: Regional Forester, R-4

Enclosed is our response to the proposed Cone Bay District Resource Management Plan.

The Cone Bay District has done a fine job of planning. The following comments are provided:

- 1) The water quality, stream ecosystem, and riparian ecosystem objectives are consistent with those of the National Forest lands, although implementation of these objectives varies between agencies.
- 2) Coordination between the Siskiyou National Forest and Cone Bay RNM District will continue to be essential for achieving planning objectives associated with old growth and mature forest habitat, connectivity areas, research natural areas, and threatened and endangered species habitat. Activity within the old growth sustainable areas will need coordination with the Fish and Wildlife Service and their Final Recovery Plan for the northern spotted owl, and the National Forest established PMS for the northern spotted owl to ensure informed decisions. We will continue to contact the RNM staff to ensure that coordination in these areas is ongoing before the PMS is finalized.

The emphasis items for ecological management and forest health in the areas programmed for timber harvest are to be considered. The leave trees on the National Forest Management Areas, using management, and large woody material management will provide a healthier ecosystem for the entire area.

We think that the ecosystem connections are important and will also require continuing coordination and cooperation.

We applied the significant efforts RNM has made to address ecosystem management and believe the state-wide coordination they have done is noteworthy as we proceed with our planning efforts. The Cone Bay Plan reflects significant thinking and energy toward ecosystem management. Some of the data displays were also well done and worth taking note.

We look forward to coordinating any future decisions as our forest planning processes continue.

/s/ Abel M. Chaverra (For)

J. MICHAEL LIND  
Forest Supervisor

# 8. Comments from the Willamette National Forest (Klamath Falls plan)

- A. The Road Management direction specified in the Klamath Falls Resource Area Plan/PSI is consistent with Road Management and Road Access direction for the Willamette National Forest.

- B. Page 2-16 and 18 (Rights-of-Way Categories): There are a number of complete reporting direction designations:

The RNM recognizes a 2,000 foot corridor, where County roads cross RNM lands, for future facility placement. The Willamette Plan did not designate County roads as Corridors. Where the Willamette Plan designates corridors, corridors correspond to the existing right-of-way/segment widths. There is no continuity of corridors between the two plans.

3) Definitions of "Inclusion" and "Exclusion" are different than what were used in the Willamette Plan. In the Willamette Plan Research Natural Areas and Sensitive Areas are Inclusion areas, not Exclusion areas. Underground utilities may be appropriate in Sensitive Areas but would not be permitted if the area was an Exclusion Area.

# 9. Comments from the Siskiyou National Forest (Salem, Eugene and Coast Bay District Plans)

United States Department of Agriculture	Forest Service	Siskiyou National Forest	Salem, Eugene and Coast Bay District Plans
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Reply to: 1022/1030

Date: November 23, 1992

Subject: Review of RNM Resource Management Plans by Siskiyou National Forest

To: Regional Forester

We have reviewed three of the RNM Resource Management Plans and Environmental Impact Statements for the Salem, Eugene and Coast Bay Districts. We are pleased to see the RNM has adopted an ecosystem management objective for the Preferred Alternative and has done an excellent job of publicizing that intent.

The overall impression is there has been excellent work on developing planning procedures and distributing the work in very readable RNM documents. We are left to see the RNM has adopted an ecosystem management objective for the Preferred Alternative and has done an excellent job of publicizing that intent. The RNM and Forest Service are presently faced with very similar land management concepts, RNM, maintaining healthy ecosystems in the Coast Range (645 of Salem District) is in the Coast Range, managing for recovery of threatened and endangered species associated with natural growth on fir forests, evaluating streams for wild and scenic river status, and improving protection of watersheds and fish resources. However, the agencies conduct separate planning processes with different methods for classifying lands and addressing management requirements. The interesting land ownership patterns in the Coast Range will require more coordination if we want to reach some common goals for ecosystem management.

Some of our concerns related to inconsistent approaches to management include the following:

1. There are apparent differences in how the Siskiyou NF and RNM will manage habitat for northern spotted owl. The Preferred Alternative for the Siskiyou NF includes lands within Designated Conservation Areas are included in old-growth snags areas (OGSA). Management of OGSA includes long-term timber management (100-200 years) and planning for density management. The 1991-92 guidelines from the Interagency Scientific Committee report, "A Conservation Strategy for the Northern Spotted Owl", appears not to be adopted. These differences would affect our ability to meet recovery goals for the spotted owl and could conflict with expectations for access across adjacent FS lands.

2. The Salem District lands in General Forest Management Areas (GFMA) would be managed primarily for timber production with traditional methods of 70-100 year rotation, selective harvest units, reforestation with genetically improved seedlings when available, fertilization on nutrient stands, prescribed fire for site preparation, weed, non-woody, herbicide to provide planting spaces and reduce competing vegetation.

Reply to: 1900

Date: November 17, 1992

Subject: Salen District Resource Management Plan

To: Forest Supervisor

The Salen NF is currently exploring new ways of managing riparian lands to be more responsive to ecosystem management objectives. We strongly support the BLM proposal to manage the OWS for landscape level diversity and to plan to leave some large, live trees in harvest areas. We would encourage BLM to explore significant ways to manage the forest lands for diversity and to address ways to reduce fragmentation of natural/adjacent ecosystems.

3. The BLM appears to be using different assumptions than the Salen NF used for evaluating effects of harvesting on fish habitat quality and resulting fish numbers. Information provided in Chapter 4 of the Salen District EIS shows there are no expected differences in habitat quality between alternatives (excluding Alternatives M and N), although the information was designed to address differences in management from OWS along streams. This gives the impression that the BLM assumes larger RMA yields, with the same stream structure, are not expected to provide greater benefits to stream condition. This approach differs from our current understanding of fish habitat management.

More specific comments related to the Coast Bay and Eugene Districts are included in the attached letter from the Eugene Ranger District. Some specific comments about the Salen District RMP are:

1. Designation of an ACEC on Marys Peak is consistent with our established Marys Peak Special Interest Area. We would encourage some coordination of potential trail developments and any recreation developments planned for Parker Creek.

2. The Corvallis-to-the-Deschutes trail planning effort is well underway at the Alsea Ranger District, but the Salen District EIS indicates that trail is not included in the preferred alternative (Table 2-3). We encourage BLM to reconsider that proposal.

If you have any questions about these comments, please contact Harriet Plunier (706-1076) or myself.

*Jim Fennell*  
JES, J. Fennell  
Forest Supervisor

cc: R. Lewis, RD-PEA

Enclosures (2)

We have reviewed the Salen District Resource Management Plan and Environmental Impact Statement for major conflicts with our Forest Plan. In general, it appears their plan would be consistent with the current Forest Plan. We encourage the Salen District to continue to make an ongoing approach for managing their lands. It appears the Salen District is utilizing different biological parameters, goals and assumptions than our agency and the Forest and Wildlife Service when it comes to analyzing the effects of their alternatives on listed species. By not recognizing the differences in approach between agencies two concerns are raised for us.

The first concern relates to access across RFO lands. Upon implementation, RLM will have expectations to utilize as developing access across lands we manage. Since they would be following different parameters, it is possible that proposed for access may be inconsistent with the Final BLM Impact Statement on Management for the Harriet Forest Unit in the National Forest.

We are also concerned that by following different conservation efforts on listed species may ability to plan and implement conservation/monitoring efforts will continue to be delayed. The best example is the effects of the "bad square" findings have had on both planned sales and acceptance of the EIS for management of the northern spotted owl.

I believe their final EIS should recognize that adjacent land management agencies are following different strategies for managing listed species.

*Conny J. Fennell*  
CONNY J. FENNELL  
District Ranger

Caring for the Land and Serving People

FD-502 (10-7)

Reply to: 1900

November 13, 1992

Subject: Review of RLM Resource Mgmt Plans

To: Forest Supervisor

In accordance with your letter dated September 30, we have reviewed the RLM Resource Management Plan for both the Eugene and Coast Bay Districts. Beginning with the Eugene District Plan, we have the following comments.

#### GENERAL DISTRICT

##### General Recreation

1) We support the basic recreation and landscape management strategies along the Salen River corridor.

2) We encourage the elimination of the Walcott Creek road into the BLM Back Country Equestrian program. This route is the principal access to our popular Rattlesnake Falls trail and also serves as a scenic backdrop near the highway 101 near Redwood. Forest Service Road 21, which falls across and into the Walcott Creek system. It is also a key part of our Discovery Route for the public. The numerous events, overviews, several miles trails, and bike route provide good opportunities for interpretation. Coordination of signing and interpretation among the Forest Service, Eugene District EIS, and Coast Bay EIS would maximize the effectiveness of access delivery to our public.

3) We encourage your development of the trail to Whittaker Falls which is along our Joint Back Country Equestrian/Discovery Route system.

4) We encourage development of the proposed Windy Peak trail in cooperation with the Deschutes Forest OWS. The Salen National Forest and Eugene District EIS are both participants in this OWS.

5) Coordination of Viable Wildlife Observation points along the Equestrian/Discovery Route corridor discussed above and along similar routes is desirable.

##### Human Use Area

1) Map EIS-1 on page 3-102 continues to show two Cemetery Hills. It is our understanding that one of these was transferred to the City of Florence.

2) We concur with the land tenure issues shown on Map 2-3-1 on page 2-14 which shows all the isolated tracts west of the Fernhill tunnel in Zone III. All or part of the isolated tracts which are significant for EIS III. All or part of the isolated tracts which are significant for EIS III. All or part of the isolated tracts which are significant for EIS III. We would be interested in having some of these either transferred or traded to the Bismillah National Forest.

3) The Heasts Sand Dune area. In particular, it is an important area in an emerging urban/rural interface that would be more effectively managed by a single agency. At present, the areas on both sides of the National Forest/BLM boundary are very similar and the landscape on the ground is not readily apparent. While many management goals are similar, specific implementation policies and methods vary and sometimes are diametrically opposed. At the same time, access to National Forest is through a small portion of EIS. The public tends to be confused and law enforcement is greatly complicated under these circumstances. Coordination of management under one agency would alleviate these problems. At the least, implementation policies and methods need to be closely coordinated to reduce these problems.

4) It is unclear if any use facilities are being proposed at the Heasts Sand Dune area as suggested on pages 3-98 and 3-97. The Salen Forest Plan also found need for visitor use facilities. Parking and sanitation facilities near the site of the agency road will be the best location. EIS and the Forest Service should closely coordinate management planning.

5) We concur that sand mining in the Heasts Sand Dune area is not acceptable.

6) We believe conservation management will be required to maintain the unusual and attractive environmental conditions in the Heasts Sand Dune. In the thousands of similar areas managed by the Bismillah National Forest, we have found serious waste such as garbage, broken glass, and even human waste have a profound negative impact. One of the more obvious changes is the reduction in the open dune area.

#### Wildlife

1) Traditional grinding of steel to create wildlife signs has not been found to be as effective as anticipated. The fatal wound tends to be the entry point for deadly organisms, resulting in premature death of the animal.

2) Habitat for species preferring arroyos and older stands is much more dependent on structure than use. Early intervention in developing more complex stands is necessary. Based on 20 years of commercial thinning experience in 20-35 year old stands, we have found that the most complex stands typical of older forests can be developed beginning as early as 10 years. This is particularly true where some residual equipment of the original stand is left in adjacent lower areas or scattered in situ. It is also possible that a landscape of these more complex stands may be more effective for timber, wildlife, and other uses and values than a "balanced" landscape with patches of 70 year rotations and 300 year rotations.

#### Plan and Wildlife

1) "These declines are not related to management activities by the District but are due to other factors that have caused declines in wildlife." This may be largely true but, based on documentation, timber harvest and road building have had some effect.

2) In 1992, the Eugene District and the Eugene District had a successful joint venture on a fish restoration project in Lake Corbett. We hope to continue these partnerships.



- 2) To support sharing of fish and wildlife survey information to better coordinate management of the resources.

#### SOON BE DISTRIBUTED

#### REMARKS:

- 1) We concur with the designation of the Smith River road into your Back Country Spways system.
- 2) We encourage the inclusion of the North Fork Smith road into the ELM Back Country Spways program. This route is the principal access from the south to our popular Ramsey Falls trail and other areas. It is a scenic backcountry route from Highway 101 near Redwood to Highway 126. Forest Service road 21, which is in the middle of this extended area, provides access to the Ramsey Falls area and into the Hager Hill-Whisper Creek system. It is also a key part of our Ramsey Falls area. The Ramsey Falls area, which is a key part of our Ramsey Falls area, provides good opportunities for interpretation. Coordination of signing and interpretation among the Forest Service, Eugene District, and Osoy Bay ELM would enhance the effectiveness of service delivery to the public.
- 3) We encourage development of the trail from Hager Hill to our Ramsey Falls trail system. We have plans to extend our existing trail westward 6 miles to an area trailhead on rd 23 near the NW quarter of section 11 (T10S; R2W).
- 4) Coordination of Watchable Wildlife observation points along the North Fork Smith corridor and along similar routes is desirable.
- 5) We encourage development of the proposed Hager Hill trail beginning at Hager Hill. This trail system would connect with a proposed trail system on National Forest. International Paper has also agreed to cooperate in this Smith River GMD-coordinated project. There appears to be significant interest in developing this trail system and some potential potential.
- 6) The Hager Hill Forest Plan found the portion of Hager Hill on National Forest to be eligible for Wild status but the suitability study has not been started. Although National Forest and ELM areas adjacent, there are some differences with generally more remote and undeveloped areas on National Forest.

#### LEADS

- 1) Several of the small and isolated blocks of land in the North Fork Smith and Hager Hill areas are adjacent to National Forest. We expect to begin another land exchange with International Paper in the next couple years. Participation in a three-party exchange may provide additional flexibility and be helpful in establishing more manageable boundaries for all parties.

#### Fish and Wildlife

- 1) May 3-5 on page 4-3 indicates that the middle portion of the North Fork Smith is an endemism fish habitat. Most of this section is in National Forest and is under management. It was noted that it is doubtful that endemism fish would be located above the 90' foot falls on the North Fork Smith.

- 2) Table 4-10-D on page 4-3 indicates only 30,000 acres of old growth on the Hager Hill National Forest over the long term. The Forest Plan projects 25,000 acres of existing old growth stands and projects that another 11,000 acres of potential mature stands will grow into old growth within the next century. Given our recent developments (e.g., Habitat Conservation Areas), there are questions as to the quality of the old growth.

- 3) We support sharing of fish and wildlife survey information to better coordinate management of the resources.

#### Mineral Resources

- 1) Habitat for species preferring mature and older stands is much more abundant on structures than on. Early intervention to develop the more complex stands is necessary. Based on 20 years of commercial thinning experience in 20-30 year old managed stands, we believe the more complex stand structure typical of older forests can be developed beginning as early as 10 years after harvest. It is possible that some of the original stand in late in adjacent late areas or scattered in unit. It is quite possible that a landscape of 70 year old and values than a "habitat" landscape of patches with 50 year rotations and 300 year rotations.

for Dave Enley for W. H. Hapthorn  
Habitat Ranger

#### United States Department of the Interior

BUREAU OF MINES  
WATER RESOURCES DIVISION  
WASHINGTON, D.C. 20540

December 18, 1992



#### MEMORANDUM

To: David A. Jones, District Manager—Bendwood District, Bureau of Land Management, Bendwood Region  
From: Chief—Bureau of Mineral Resources and Economic Analysis  
Subject: Bendwood District Draft Resource Management Plan and Environmental Impact Statement (RMP/EIS)

The Bureau of Mines is in the process of reviewing all of the water resource draft RMP/EIS. In this process, we evaluate the RMP/EIS coverage of mineral resources, the BLM's management of mineral resources, mineral exploration and development covered by the management of mineral resources, and other resources in a plan.

The Bendwood RMP/EIS gives an excellent explanation of the District's management of mineral resources and the management of other resources will and your staff on the BLM's management of mineral resources. The BLM's relationship between mineral resource activities and other resources in a plan designed to optimize an economic management plan.

We would, however, like to make some suggestions. A comment of the Bendwood RMP/EIS is that the Bendwood District can only be as accurate as the data it uses. In this context, the Bendwood District's RMP/EIS is accurate. The RMP/EIS states that there are a variety of mineral resource types in the Bendwood District and that there are a variety of mineral resource types in the Bendwood District. The Bendwood District's RMP/EIS states that there are a variety of mineral resource types in the Bendwood District and that there are a variety of mineral resource types in the Bendwood District.

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Area	Value
10	1.0
11	1.0
12	1.0
13	1.0
14	1.0
15	1.0
16	1.0
17	1.0
18	1.0
19	1.0
20	1.0
21	1.0

Commodities	Value
10	1.0
11	1.0
12	1.0
13	1.0
14	1.0
15	1.0
16	1.0
17	1.0
18	1.0
19	1.0
20	1.0
21	1.0

mineral development, why are the additional areas, with known locations of mineral activity, not identified as having high potential?

We also note that the mineral potential map has several dark boundaries within the Bendwood District mineral activity which have no identification purpose. As they represent designated mineral areas, we consider that they should be shown on the map. Are they dark or perhaps even not designated as the map?

Based on the apparent underestimation of mineral potential, the availability of lands for mineral resources by alternative lands in Chapter 4 should be changed. If the Bendwood District mineral potential map is inaccurate, the Bendwood District mineral potential map should be changed. The Bendwood District mineral potential map should be changed. The Bendwood District mineral potential map should be changed.

We would also like to point out some discrepancies in the mineral potential map. These changes are suggested primarily to strengthen a credibility of the data. The Bendwood District mineral potential map should be changed. The Bendwood District mineral potential map should be changed. The Bendwood District mineral potential map should be changed.

Our final comment concerns the standard requirements under Bendwood District mineral potential map. The Bendwood District mineral potential map should be changed. The Bendwood District mineral potential map should be changed. The Bendwood District mineral potential map should be changed.

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between territories. This is only one aspect of the cluster concept. Clusters were designed to be large enough to support populations sufficient to provide some level of internal stability in the short-term. The strategy should include a discussion of the capability of the OGEs, and the management proposed within the OGEs, to maintain populations levels sufficient to provide internal stability.

This paragraph and the following discussion mention the need for recreational dispersal between these large habitat blocks. As discussed in the general comments, the RNS does not indicate how this critical dispersal will be

This paragraph and the following discussion mention the need for successful dispersal between these large habitat blocks. As discussed in the general comments, the RMP does not indicate how this critical dispersal will be maintained.

Page 4-BI, Column 2, Paragraph 5. This paragraph should indicate why the A chooses to use 50-11-60 as a measure of dispersal given it's limited validation. If another method is appropriate, it should be provided here.

Page 4-33, Column 1, Paragraph 1. Provide information and analysis as to why the distribution of patches and strips of high quality habitat are adequate to provide this type of habitat and why this is important to dispersal.

Page 4-33 & 34. The entire discussion of diapausal habitat in the Medford

Page 403, 5, 36. The entire discussion of diurnal habitat in the Madford District is difficult to follow. There should contain a succinct discussion of the impacts of the preferred alternative on diurnal condition and the impacts of diurnal condition on spotted owl populations. There is also a general lack of detailed information on the effects of the preferred alternative on the diurnal condition.

Page 4-18, column 1. Very little information is provided to allow evaluation of the impact of the preferred alternative on disposal condition. The RSP should provide a complete analysis of the impact of the preferred alternative, including the potential for disposal conditions and 40-40-40. This should include short-term, low-point, and long-term impact analyses, as well as impacts on a provincial basis. This is particularly important in the northern portion of the District where GPM management will not necessarily meet disposal needs.

Page 4-26. Column 3, Paragraph 5. The northern portion of the district lies within the Rogue-Umpqua Area of Concern for dispersal movements across the northern portion of the Klamath province from the Western Cascades to the Oregon Coast Ranges provinces. This area is critical to distribution of the spotted owl. The area between and adjacent to BGRs 00-16 and 00-26 for 6 miles south of the district boundary should be designated and managed as a connectivity area.

Page 4-18, column 2, Paragraph 2. The document indicates that there is a low point in the carrying capacity projection sometime between 10 and 20 years. A discussion of the potential impact of this low point on the viability of spotted owls should be included.

Page 4-10, Column 1, Para 2. Provide rationale or documentation for the statement that isolation "is not thought likely to be a factor" under the preferred alternative. Currently there is no grounds or basis provided for this statement are provided. Given the previous discussion of dispersal condition and the level of "management" in the area of concern, isolation appears to be a legitimate threat.

if truly viable populations of old growth dependent wildlife species and their enhancement over the long-term.

Relative to the threatened northern spotted owl, the RMP differs significantly from the draft Recovery Plan. Specifically, the Service is concerned about the impacts of proposed management activities within the deferred GCHAs, and recommends the development of a GCHAs plan. The Service is also concerned in light of the continuing loss of habitat in the intermediate-term, and the failure of the RMP to address impacts to designated spotted owl critical habitat. The Service recommends that the preferred alternative include limitations on the management in GCHAs and thresholds for dispersal condition. Given the untreated nature of many of the proposed silvicultural prescriptions, the Service believes that a plan that addresses the need for a recovery plan is warranted and should be developed prior to implementation of the plan.

Finally, we once again wish to commend the Madford District for recognizing the need to manage their lands for biodiversity and ecosystem viability.

Roger E. Zoraster

BARBARA ROBERTS  
GUTHRIE

OFFICE OF THE GOVERNOR  
STATE CAPITOL  
SALEM, OREGON 97310-0375  
TELEPHONE: (503) 376-3111  
December 15, 1993

Mr. David Jones, District Manager  
Bureau of Land Management  
3040 Riddle Road  
Medford, OR 97504

### Gear Design

Enclosed you will find the State of Oregon's Final Coordinated Response to the Medford District's draft Resource Management Plan and Environmental Impact Statement. We have also attached copies of six position papers, state agencies' final comments and the Oregon State University Report. This response represents the State's final review of concerns that eleven state agencies, the public and interest groups, and Oregon State University have expressed to us over the last several months on RMP's draft plans.

I encourage your District staff to feel free to contact the Governor's Forest Planning Team to gain a full understanding of specific concerns and recommendations that we have outlined in our response.

I thank you and your staff for the field trips and discussions afforded the Governor's Forest Planning Team over the last year. We look forward to continuing this cooperation with your District. If you have any question about the State's final response, don't hesitate to call.

Sincerely,

Anne Squier  
Senior Policy Advisor for  
Natural Resources





**Tourism and Recreation.** The State recommends that RNM expand recreational opportunities on its lands. This would involve increasing/expand existing recreational opportunities, building additional trails, and protecting scenic quality along state/federal highways and Wild and Scenic Rivers.

**Timber Management.** While the State supports RNM's new biological diversity response, we question predicted harvest levels anticipated from various land allocations. In particular, growth and yield assumptions may not meet the timber values expected from lands within the timber base. State support depends on RNM management practices to produce the predicted allowable sales quantities must be accompanied by strict forest management implementation and monitoring. Forest health should be more adequately addressed in the final plan.

**Wildlife Management.** RNM needs to more explicitly explain how they intend to improve habitat (cover, forest and road management) for deer and elk. RNM should further protect other wildlife, especially sensitive, threatened and endangered species. The State supports the creation of older stand conditions through approved silvicultural programs. The State urges RNM to comply with the Final Recovery Plan for the Northern Spotted Owl and continue the consensus on the best way to provide for the recovery of the species, northern spotted owl and other threatened and endangered species.

**Old Growth.** RNM districts are preparing various techniques to maintain/protect older-growth forests. The State supports RNM's overall approach to maintain and protect old growth stands through management. Old growth-dependent species must also be allowed through landscape diversity and accelerating older forest conditions in adjacent RNM lands.

**Livestock Management.** The State recommends that RNM develop detailed allotment management plans for every grazing allotment. Of concern is livestock's impact on fish and wildlife habitat, big game, and riparian-dependent species. The State encourages range improvement projects to increase forage and water developments which should help draw livestock away from riparian areas.

**Minerals and Energy.** RNM should acknowledge and preserve access to state-owned mineral rights. RNM should further recognize the value of mineral and energy resources when making land management decisions.

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**Recreation/Management.** RNM's draft plans have not sufficiently addressed the social and economic implications of their preferred alternatives on Oregonians. RNM needs to more specifically address local impacts of district plans on community stability, further evaluation. Monitoring of the socio-economic conditions created by implementation of the preferred alternatives needs to be addressed.

**Road Management.** The state recommends that each RNM district develop a comprehensive road management plan. The plans would be used to manage access which in turn would improve wildlife habitat, scenic quality, and recreational opportunities.

**Final Plan and State Response.** RNM should expand its inventory of sensitive plants and implement standards for protection including monitoring. RNM should aggressively follow the interim management plan for sensitive plant year.

**Wildlife Concerns.** Lands administered by many RNM districts are used by Native Americans and contain historically significant identify, during project planning, these sites and protect them during implementation of management activities.

**Standards and Monitoring.** The implementation of biological diversity by RNM will mandate a comprehensive monitoring program, determining whether the expected future conditions are being accomplished. Specific, measurable standards must be a component of the total monitoring plan. The state recommends that RNM strengthen its standards and monitoring program in the final plan.

**Response.** Adequate funding is essential for implementation and monitoring of RNM's biological diversity strategy. Dedicated funds for advanced monitoring programs being prepared are needed. The State believes that RNM budgets should not be necessarily linked to allowable sale quantity levels.

**Detailed State Final Coordinated Response.** Questions regarding the State of Oregon's Final Coordinated Response should be directed to: Governor's Forest Planning Team, 155 Cottage Street, Salem OR 97310, Phone: (503) 278-8127

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STATE OF OREGON'S FINAL COORDINATED RESPONSE  
TO  
BUREAU OF LAND MANAGEMENT  
DRAFT RESOURCE MANAGEMENT PLAN  
AND  
DRAFT ENVIRONMENTAL IMPACT STATEMENT

I. INTRODUCTION

The Bureau of Land Management administers 2.8 million acres of land in western Oregon including parts of Klamath County. In total, this accounts for approximately nine percent of the forest land base in western Oregon. Fish and wildlife, domestic water, timber, recreation, grazing, and minerals are just some of the resources contribute millions of dollars each year to Oregon counties for schools and roads. The importance of RNM lands to the people of Oregon cannot be over-emphasized.

Recognizing a need to coordinate State responses to federal resource management plans, the Governor's Forest Planning Team was created in 1987. This team, which includes representatives from twelve state agencies, has worked together over the last five years to develop coordinated responses to major federal land management planning documents.

Most recently, the Governor's Forest Planning team has worked closely with five RNM districts (Harford, Salem, Roseburg, Coos Bay and Eugene), our Resource Area (Klamath Falls) and the State Office in Portland in an effort to better understand RNM's planning process. The State also conducted six "open houses" monitored throughout the State to solicit input on RNM's draft plans. Comments received from the public's review of the State's proposed coordinated response have also been considered. Input from the public, state agencies, and Oregon State University form the basis for the State's final response.

The following document is the State of Oregon's Final Coordinated Response to the six draft Resource Management Plans (RMPs) and Environmental Impact Statements (EISs) for the RNM districts. The response represents a consolidated response to the six draft RMPs and EISs and includes comments appropriate to each RMP by district/resource area. Individual state agency comments and Oregon State University's report have been attached for review.

We appreciate the cooperation that RNM districts, the Klamath Falls Resource Area and the State Office have given the State Team in understanding the planning process. This kind of working relationship strengthens the quality of the State and the State's development resource management plans acceptable to Oregonians and the Nation.

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II. MAJOR ISSUES

A. **Ecological Management.** How will RNM implement ecosystem management that responds to protecting sustainability, protective, and healthy ecosystems while still producing goods and services?

B. **Land Use.** How can RNM better address problems encountered in managing rural interests areas? How RNM set the federal consistency requirements of the National Coastal Zone Management Act and Oregon's Coastal Zone Management Program? Has land tenure been adequately addressed? How has State ownership of surplus/subsurface ownership rights been handled?

C. **Fish and Watershed Management.** How will RNM use analytical techniques to measure cumulative effects of management activities? How will riparian areas and wetlands be protected? How will fish habitat be protected and enhanced?

D. **Wild Quality.** How should RNM address the use of prescribed fire as a natural management tool in terms of the potential impacts on air quality?

E. **Tourism and Recreation.** How should RNM manage for recreation, visual resources, and Wild and Scenic Rivers?

F. **Timber Management.** Are RNM's timber growth and yield assumptions valid? How will silvicultural practices be used to support predicted harvest levels? Will RNM be able to produce the harvest levels predicted by land allocations? Has RNM adequately addressed forest health?

G. **Wildlife Management.** How should RNM districts manage for big game habitat? What steps should RNM provide for cavity-dependent birds and other wildlife? How should sensitive, threatened and endangered wildlife species be managed?

H. **Old Growth and Mature Forest.** How will RNM manage its forests to maintain old growth and mature forest competition?

I. **Livestock Management.** How will RNM manage its grazing lands for livestock and wildlife while protecting other resource values, in particular riparian areas?

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J. Minerals and Energy. How should BLM recognize and manage its mineral and energy resources?

K. Species-Biology. How will the adopted plans affect economic opportunities in surrounding communities? What impact will the plans have on soil-economic stability in the planning area and statewide?

L. Road Management. How should districts/resource areas manage their road networks to promote compatibility with resource uses?

M. Special Plant and Tree Species. How should BLM protect special status plant and tree species?

N. Tribal Concerns. How should BLM districts protect traditional Tribal cultural and spiritual sites?

O. Standards and Monitoring. Does BLM have measurable standards and a comprehensive monitoring program to determine whether plans are meeting short and long-term expected future conditions?

P. Budgets. What budget will BLM districts need to carry out the preferred alternative? How should the districts react if a smaller budget allocation occurs?

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# DISCUSSION OF MAJOR ISSUES--

A. Ecosystem Management. How will BLM implement ecosystem management that responds to changing sustainable, productive, and healthy ecosystems? What are the objectives, goals, and principles?

## 1. Concepts and Principles

Managing lands and resources based on ecological principles has been emerging as a new view in scientific literature, research, and in public policy. This view is seen as being not only biologically sound, but also more attuned to public expectations and values of doing a better job of managing our natural resources. It makes sense for programs and organizations to work under a systems concept which includes people, animals, soils, plants, water, climate, with the processes of nature working together as a whole.

The concepts presented in this section and in the State's paper, titled, Ecosystems: A Coordinated State Response to BLM Resource Management Plans (Appendix 1), were derived from literature searches, field trips, and discussions with researchers and land managers on defining principles and implementation strategies for ecosystem management.

The State believes that the guiding principle of ecosystem management is to create a more ecologically sustainable, productive, healthy, and resilient natural ecosystem. How to meet this objective is a complex issue land managers must face. One thing is certain, however, a change is needed on how we have traditionally managed our resource lands. We believe that change may be achieved through the careful application of ecosystem management.

The Reverted Oregon and California Railroad Grant Act (OACG) and the Federal Land Policy and Management Act are the two major pieces of legislation that govern the management of BLM lands in Oregon. Within these laws, ecological principles define management constraints, management approaches, and predictions of those ecosystem responses necessary to ensure proper maintenance of sustainable systems. People will continue to play a major role in this ever-changing ecological system.

Another law which has influenced management on not only BLM lands but other federal, private and state lands is the Endangered Species Act. This Act requires the protection and recovery of species determined to be endangered or threatened, regardless of other legal mandates.

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## 2. Goals of Ecosystem Management

The State's comments on BLM's biodiversity strategy are based on the following five objectives:

- Maintenance and restoration of biological diversity at four levels of organization: geographic units, genetic composition, communities and ecosystems.
- Sustainability of components and processes of ecosystems over time and long-term productivity and resiliency of such ecosystems.
- Contribution to the basic needs of people and communities who depend on the land for subsistence, livelihood, and social and spiritual development.
- Conservation of sensitive ecosystems such as wetlands, riparian zones, and fragile sites.
- Provide consistent linkages between forest health and ecosystem management.
- Intensively monitor and evaluate implementation of biological diversity to determine if short-term goals are leading to long-term expected future conditions.

### 3. Consistency with Legal Statutes and Authority

BLM manages 44 percent of the land in western Oregon/Plains/Palisades Resource Area under the Reverted Oregon and California Railroad Grant Act (OACG) and 56 percent of the Oregon and California lands. The remaining 14 percent are referred to as Public Domain lands managed under the direct authority of the Federal Land Policy and Management Act (FLPMA). The OACG and Public Domain lands have different legal mandates on how they should be managed. BLM has stated in the preliminary planning documents that it would make planning decisions consistent with these laws.

While it is conceivable that, with the requirements of the Clean Water Act, the Clean Air Act, and the Endangered Species Act, Public Domain and OACG/PLM lands could be managed similarly, it is not obvious that they should be so managed. The mandates are different; the management approaches to protect and enhance may be different and, the beneficiaries of these approaches are different.

BLM draft plans have not explained the rationale on how their biological diversity-based preferred alternatives are consistent with the legal mandates for OACG/PLM lands. The relationship

between the preferred alternatives' ecosystem management concepts and existing laws governing the management of OACG/PLM lands need to be clearly articulated in each final plan.

## 4. State's Recommendations

Biological diversity principles used by BLM in developing their draft plans represent a holistic approach to managing resource lands. We commend BLM on this effort.

The State's comments on biological diversity, found in the draft plans, are based on principles found in our position paper (Appendix 1). These principles are described below.

- Expected Future Condition.** BLM RMPs should identify and examine the expected future condition for biological diversity. Expected future condition goals should relate to the compositional, structural, and functional attributes of ecosystems and should include a regional perspective. BLM districts need to express in greater detail what the expected future conditions will be from implementing the preferred alternatives.
- Prescriptions.** RMPs should include specific, measurable prescriptions or standards which when implemented would work toward meeting the expected future condition. While prescriptions are part of each draft plan, it is not clear how they will meet the biological diversity short- and long-term goals.
- Ecosystem Condition.** RMPs should provide information on the current condition of ecosystems (e.g., old growth) and examine the structural, functional, and compositional attributes of ecosystems and ecosystem (e.g., old growth) at high risk due to human activities. Ecosystem conditions should be used to monitor trends in biological diversity over time and to make necessary adjustments in plans. Standards and monitoring plans for evaluating whether they are being met need strengthening.
- Research and Adaptive Management.** The RMPs should detail how BLM plans to integrate management, monitoring, and research to continually apply adaptive management and improve the scientific basis for ecosystem management. This has not been sufficiently addressed in the draft plans.
- Ecosystem Monitoring.** RMPs should include specific monitoring goals and standards. Monitoring plans should include prescriptions are meeting the expected future conditions. For example, in forest age class distribution within a certain forest allocation moving toward or away from the

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expected future condition? BLM plans should integrate management, monitoring, and research to continually apply adaptive management and improve the scientific basis for ecosystem management. BLM districts need to develop more comprehensive, monitoring plans to measure the long-term condition of ecosystem management.

8. **Ecogenetic Development.** RNM operates under laws and regulations that protect the genetic diversity of all types. People are part of and are dependent on the genetic diversity of the natural resources. The linkages and dependency (social, economic, spiritual) of the people and the natural resources, agriculture, industry, etc., ecosystems within each land allocation.
9. **Threatened and Endangered Species.** RNM should reflect the conservation of threatened and endangered species in forest management plans. RNM should have a policy that protect endangered, threatened, and sensitive species. This policy should be based on the best available scientific information, as well as ecosystem management provisions for preventing extinctions. Using information on the status of species, placed on the recovery requirements of the spotted owl and the marbled murrelet, RNM should develop a conservation strategy for meeting the requirements of the Endangered Species Act. RNM should have a policy that determine whether this strategy is sufficient to meet the upcoming legal requirements of the Endangered Species Act.
10. **Silvicultural Practices.** RNM plans should identify the natural resources and the values of the forest and the relationships which will lead to the goals of the forest management plan. RNM should have a policy that guidelines for timber harvest and forest management, achieving species diversity, maintaining forest health, and forest succession, forest structure, rotation ages, vegetation control, forest protection, forest management, forest improvement, harvest management, fertilization, and forest management. RNM should have a policy that forest management approaches to managing its lands in response to the needs of the sensitive and threatened species and their resource values.
11. **Coordination.** RNM should clearly specify methods for monitoring and evaluating the effectiveness of the plan with adjacent forest landowners. Specifically, RNM must work with the USFS to ensure that the plan meets the USFS policy to ensure that activities to achieve the plan's goals are consistent with the USFS plan.

and activities of these agencies. NIM plans should explain in more detail how they plan to coordinate their biological diversity program with adjacent landowners and more broadly on a landscape level.

### 3. SUMMARY

The State applies RMN's biological diversity strategy as it recognizes the forest ecosystem from a holistic perspective rather than the traditional single-emphasis management. Each draft plan outlines the important components of biological diversity and the specific management actions and long-term (100-year) expected future conditions. The concern over fragmentation, due to ownership patterns and past intensive logging activities, is addressed by the State in the Designated Conservation Areas (DCAs) grid, Old Growth Emphasis Areas, Conductivity Areas, special areas, and other allocations. The State's biological diversity strategy and the monitoring will be essential to determine if RMN's biological diversity strategy is meeting expected future conditions.

Many questions remain to be answered by the scientific community and land managers on how to successfully manage lands using ecosystem management. ELM's ecosystem management approach will be very helpful in answering these questions over time.

D. Land Use. How can BLM better address problems encountered in managing rural interface areas? Has BLM met the Federal consistency requirements of the National Coastal Zone Management Act and Oregon's Coastal Zone Management Program? Has land tenure been adequately addressed? How has state ownership of surface/subsurface ownership rights been handled?

## 2. Rural Interface

BLM has identified the management of rural interface areas as one of eleven major planning issues to be addressed by each district and the Klamath Falls Resource Area.

The term "rural interface" refers to those areas where BLM-administered lands are adjacent to or intermingled with predominately privately owned lands zoned and/or used for agricultural, forest, rural residential, and other resource and nonresource purposes.

Owing to the close proximity of BLM holdings with other lands and population growth in these areas, BLM, private and other public landowners are expected to experience increasing levels of conflict with one another over the management and use of their respective ownerships.

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Taken together, the draft resource plans state that rural interface conflicts affecting the management of BLM lands in Oregon are becoming greater, with the most extensive problems occurring in the western District. One of the most visible results of this development is that wildfires over the several years, particularly in southern Oregon, have destroyed and/or threatened increasing numbers of lives, resources and structures in rural interface areas.

Statewide, BLM has calculated there are approximately 194,000 acres of BLM land lying adjacent to private lands currently zoned to allow development on 1 to 20 acre lots.

#### e. BIM's Response to Rural Interface Problems

The preferred alternative in each district's draft plan conceptually treats the rural interface issue in the same manner. Each district proposes to establish a buffer area on its lands which lie adjacent to private lands zoned with minimum lot sizes ranging from 1 to 20 acres.

Within these buffer areas, SLM management activities would be altered where feasible to mitigate the concerns of nearby residents. Examples of the kinds of special management practices undertaken by SLM in the interface buffer include restrictions on public access, road building, harvesting methods and frequency, and application of herbicides and pesticides.

#### b. State's Recommendations

The State's review of BLM's interface strategy is based principally on a policy paper titled, Recommendations to BLM For Managing Rural Interface Areas, transmitted to BLM from Governor Roberts in December 1991. (Note Appendix 1) The paper, which BLM encouraged the State to produce, formally acknowledges that the problem of rural interface areas involving BLM lands is a matter of critical state concern.

The paper calls upon RIM to enter into a special partnership with the State of Oregon so that the rural interface problem can be addressed comprehensively rather than in a fragmented, uncoordinated manner. Unlike other states, Oregon presents RIM with a unique opportunity through its recognized statewide land

The State's paper contains six specific recommendations aimed at enabling BLM to join with state and local governments in achieving significant progress on various aspects of the interface problem, including policy development, agency coordination, information exchange, and conflict resolution.

Unfortunately, after review of the six draft RMPs/EISs, it is disappointing to note that BLM apparently rejects a proactive approach described in the State's paper for dealing with rural interface areas.

The State believes that BLM's passive strategy of relying on uniform buffering of federal lands will do little to alleviate new inappropriate developments in rural interface areas. This strategy further will severely limit BLM's opportunities to implement effective forest management programs on these interface lands.

The State urges HLM to incorporate the following recommendations, as described in the State's interface paper and the Department of Land Conservation and Development's comments to the RMPs (Appendix 2), into the final resource management plans.

- (1) RMA should act consistently with Oregon laws, policies, and programs adopted to protect the state's forest land base for timber production and other forest uses.
- (2) RMA should increase its participation in Oregon's statewide planning process to ensure that RMA's actions are accomplished through establishing joint state and RMA working groups to further RMA's involvement in the statewide land use program and other related state efforts to address rural interface problems.
- (3) RMA's State Office should provide policy guidance to districts for addressing rural interface issues.
- (4) RMA, in cooperation with the State of Oregon, should establish and apply a clear definition of rural "interface areas" which takes account of variations in rural interface, forest, state and local plans, and other land use factors.
- (5) RMA should incorporate the rural interface issue into its agreement with the State of Oregon for monitoring the protection of RMA's forest lands.

### 3. Federal Consistency

Four BLM districts (Salem, Coos Bay, Eugene and Roseburg) administer the Coos Bay area under the federal consistency requirement as provided in the Coastal Zone Management Act. Under the Act, any federal activity, within or outside the coastal zone that affects any land or water use or natural resource is subject to federal consistency review in a manner which is consistent, to the maximum extent practicable, with the enforcement policies of the State's federally approved coastal management program. The mandatory enforcement policies contain the following:

- The Statewide Planning Goals adopted by the Land Conservation and Development Commission;
- Admired city and county comprehensive plans and land use regulations; and
- The statutory authorities and regulations of selected state agencies.

A preliminary analysis of a federal agency's consistency determination is made by the State following review of the draft plan or project being proposed. The final consistency determination by the State of Oregon is made following release of the final environmental impact statement on the adopted plan or project.

Based upon preliminary analysis, it appears that the draft RMPs for the four districts are consistent with Oregon's Coastal Management Program.

However, formal state concurrence with RMP's determination of consistency cannot be made at this time due to a lack of specific information in the RMPs which demonstrates that all of the applicable mandatory state authorities listed in the Oregon Coastal Management Program have been met.

For the purposes of the final federal consistency determination, RMP will need to document in the final RMPs how the selected management alternative for each RMP complies with the statutory authorities and regulations of the Oregon Coastal Management Program. Until such an analysis is conducted and incorporated into the final RMP, full concurrence by the State on RMP's consistency determination with the Oregon Coastal Management Program cannot be made. (See Department of Land Conservation and Development's comments on federal consistency - Appendix 2.)

### 3. Land Tenure

RMP districts have inventoried and categorized their lands according to resource value (e.g., timber, wildlife, wetlands), land status (e.g., OAC or Public Domain) and ownership pattern (e.g., scattered or block). We have three concerns on how districts have addressed land tenure.

First, there seems to be no uniformity on how districts have categorized their lands. Coordination between adjacent districts is lacking and land tenure maps included in the plans are difficult to interpret. We strongly recommend districts develop common criteria and coordinate among themselves to develop decisions to interpret uniformly into the process.

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Second, an In-Indian Land selection settlement has occurred between the State and BLM within the last year. The State, according to the courts, is allowed to select 5,202.19 acres of BLM Public Domain land. Our concern is the lack of location of this settlement in the Land Tenure section for the preferred alternatives. We request that language be inserted which clearly states BLM's responsibility to accommodate the state's selection within the requirements of the law. (Note Division of State Lands response - Appendix 2.)

Lastly, OAC and Coase say Wagon Road lands that are suitable and available for timber production may be converted to agricultural or other uses of single use lands. These lands should be retained for forest production but are not.

### 4. Navigability

None of the draft plans acknowledges existing or potential State ownership claims on navigable waterways within RMP districts. Language, noted in Division of State Lands response, should be included in each final plan regarding navigability.

C. Fish and Watershed Management. How will RMP use analytical techniques to measure cumulative effects of management activities? How will riparian areas and watersheds be protected? How will fish habitat be protected and enhanced?

One of the State's goals is to ensure that RMP restore and protect riparian-dependent and upland resources. This is consistent with RMP's direction in the Federal Land Management and Policy Act, the OAC and other federal and state laws. It is also consistent with RMP's long-term objective to maintain and enhance watersheds that currently are in good condition while improving those identified as declining. The comments and recommendations that follow are based on this goal.

Rivers, streams and lakes, and their riparian areas are valuable resources. Within their area of influence, they provide habitat for wildlife and fish and furnish domestic water and recreational opportunities such as boating, swimming, and fishing.

RMP's Fish and Wildlife Goals -- A Vision For The Future has set several objectives for improving water quality and riparian area and watershed conditions in Washington and Oregon. The goal, according to this plan, is to improve natural side effects of streams. Evaluation and monitoring is also emphasized as a major component of the program.

Maintaining and enhancing fishery resources, as noted in all of the draft management plans and the RMP's Fish and Wildlife Goals, is an admirable undertaking. Careful management of riparian

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areas combined with manipulating harvest schedules in watersheds and stream improvements should help protect the fishery resources in western Oregon. As a general rule, RMP should not acquire restoration, enhancement projects or mitigation for adequate protection of riparian dependent resources except when damage from essential activities is unavoidable. RMP's proposed biological diversity strategy should help to achieve the expected future conditions desired in watersheds.

### 1. Fish

A State goal is to restore and protect fish stocks. Declining fish stocks in the Columbia, Snake, and several southern Oregon rivers will require an unprecedented effort by resource managers to reestablish acceptable wild fish populations. This effort must include cooperation by all landowners on the management of watersheds and, in particular, riparian areas. RMP needs to be an active player in this long-term process.

Many studies are underway (some on the Columbia River system alone) to examine the causes for declining fish runs in the Northwest. Preliminary theories on why fish runs are declining range widely from dam construction to deteriorating conditions of our watersheds. Many believe it is a combination of many factors, all interrelated, which have led to the problem. The types of fish habitat enhancement projects over the next decade are generally not enumerated or described in the draft plans.

Fishery concerns which RMP can influence in their land management decision process include: watershed management (including riparian area protection), forest management practices, and grazing.

### Sensitive Fish Species

Several of the listed sensitive fish stocks, which have been noted by the Oregon Department of Fish and Wildlife (ODFW) as occurring on the various BLM-administered planning areas include: chinook salmon (Lower Columbia River and South Coast Fall run stocks), chum salmon, coastal cutthroat trout (intermediate Columbia River basin stock), coho salmon (Lower Columbia River and South Coast stocks), Oregon chub, Jenny Creek cutthroat, redhead trout, Lost River and Short-nosed sucker; just to name a few.

Of particular concern is declines in fish production in the Tillamook River. Winter steelhead are of special concern since this stock has been petitioned for threatened or endangered status under the Endangered Species Act. The basin's fall chinook and coho populations have also declined.

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RMP has surveyed its lands and has concluded that aquatic habitat on some of its lands is not in good condition. These conditions will seriously influence RMP's ability to improve habitat for sensitive fish stocks occurring on their lands.

The State recommends that RMP conduct a survey to identify declining fish populations and develop recovery plans for high risk populations. RMP should take aggressive action to improve sensitive fish habitats working closely with the State, other federal agencies, tribes, and interest groups. RMP should describe more completely how their preferred alternatives will impact sensitive fish stocks, and what steps would be taken to mitigate adverse impacts.

### 2. Water Quality and Quantity

#### a. Water Quality

A State goal is to ensure that RMP meets or exceeds state and federal water quality standards. The draft RMP plans have stated that they meet federal and state water quality standards. However, several districts have identified water quality that do not currently meet these standards. Best Management Practices (BMPs) describe more completely how their preferred alternatives will impact sensitive fish stocks, and what steps would be taken to mitigate adverse impacts.

The State believes that the RMPs listed in the draft plans contain few measurable standards and varied widely between districts. Furthermore, standards are neither clear nor specific enough to be used as standards for these sites. More information is provided in the plans to show how managers will make determinations regarding water quality and erosion potential for forest management activities.

Further concern has been expressed over the lack of information on landslides. Landslide prevention is a critical component to maintaining water quality on forest lands. RMP has identified fragile sites (unstable soil areas) through its Timber Production Capability Classification Inventory. While we assume that the inventory included the identification of potential landslides, we are concerned that the location of these specific sites described in the draft plans.

We believe RMP districts have not sufficiently addressed potential landslides problem. The State is surprisingly lack information regarding slope stability which is needed for, among other things, the location of these specific sites.

The State recommends that RMP districts strengthen their commitment to water quality through the following:

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- e. RNM needs to make BMPs more specific to ensure that water resources objectives are being met. Long-term standards include conditions for which BMPs are applicable. Supporting policies and documents also need to be consistent with the BMPs.

- f. Consistency through coordination in implementation and monitoring are needed not only within a district but also between districts. The State recommends that RNM develop more comprehensive monitoring and reporting procedures. The Forest Service (Bureau National Forest), State Department of Forestry and others in identifying (using GIS) and protecting potential riparian areas.

- g. Where streams do not meet State water quality standards for temperature, RNM should not allow activities, (e.g., grazing) which would increase temperatures over the long term.

- h. Temporary (one-season) temperature increases would be permissible from the following activities: restoring or improving riparian areas or in-stream habitat; stream bank protection; required transportation equipment; harvest corridors; structures associated with putting water to beneficial use or other essential activities such as fire suppression, flood control, or administering RNM lands. Water temperature increases from these activities should be minimal and adequately monitored, especially for cumulative effects. Temporary disturbances should be scheduled when adverse effects to beneficial uses would be minimized.

- i. RNM should evaluate future road design, construction, and maintenance standards to ensure protection of water quality. As noted in the Oregon State University response, adequate culvert sizes (consider 25 and 30 year flood) are necessary for draining runoff. Catastrophic road failures from poor culvert design and plugged culverts, can have a major impact on downstream channels, riparian area values and fisheries resources. The Oregon Forest Practices rules are currently being revised to consider larger culvert sizes in private lands.

The Department of Environmental Quality (DEQ) has conducted intensive monitoring of water quality in several basins in western Oregon since publication of RNM's Analysis of the Management Situation. DEQ is encouraged to contact DEQ for the results of these monitoring programs especially on streams running through RNM lands. (See DEQ comments in Appendix 2.)

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geographic setting. Second, districts have a better opportunity to monitor the cumulative effects of all management activities on water quality and quantity, fish, wildlife, and recreation, plus other resources.

RNM's methodology of using an index to measure the cumulative effects of various current and future management practices within individual watersheds has merit. The condition of watersheds could be used to determine where forest management activities could or could not occur. However, the State is unclear how the waterbodies condition indicator used in the plans (the watershed condition index) was generated, how it was used in management planning, how it will be used in standards, guidelines, and monitoring, and how it will be validated.

The State is concerned about predictions in the draft plans' preferred alternatives that some watershed conditions will decline over the life of the plans or even worsen from existing poor conditions. For example, the Salem District predicts that in 14 of its 27 analytical watersheds (4 percent), conditions will either decline to a "minor" or "significant" degree over the short-term under the preferred alternative. According to RNM's Response Summary, Western Oregon Draft Resource Management Plan/Environmental Impact Statement, 43 watersheds "probably" will have declining conditions over the next ten years under the preferred alternative.

The State fails to understand how declining watershed conditions will meet water quality and other resource objectives set forth in the draft plans or even state and federal water quality standards. It would seem that basin-specific prescriptions to restore or enhance water quality (e.g., sediment and temperature) and aquatic habitat have not been adequately addressed.

Recommendations on watershed management and condition index that RNM districts need to consider when they develop their final plans are listed below.

- a. In order to obtain more significant data from evaluation and monitoring, RNM should modify watersheds to include those greater than 10,000 acres into smaller, more manageable units.

- b. RNM should set watershed impact standards to help guide forest management activities. Standards should address maximum soil compaction, erosion rates, equivalent clearcut area, and relative percentages of stream bank. If standards are projected to be exceeded, proposed projects within a watershed should be reevaluated. Similar standards are not being set.

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### 3. Water Quantity

- a. State goal is to provide a sustainable amount of water to meet the needs of Oregonians and fish and wildlife resources.

Recessive years of drought statewide have elevated concerns over the availability of water. How RNM should manage water in streambeds, beneficial use, community watersheds, and RNM lands. However, additional information is needed to strengthen the discussion on water quantity.

- b. The State makes the following recommendations:

- a. The final plans should acknowledge the limits on the availability of surface water and address surface water quality problems.
- b. Districts should describe watershed improvement and stream restoration activities which increase low season flow.
- c. District plans should address ways to conserve and reduce water consumption and water quality.
- d. RNM should expand their discussion concerning the availability of groundwater and groundwater quality problems.
- e. Final plans should provide a more thorough discussion of the potential effects of the alternatives on water yields and streamflow. Other recommendations are outlined in Near Resources Department's response (Appendix 2).

### 4. Watershed Management

Oregon's Strategic Water Management Group has developed a watershed management goal for the State. This goal, in part, notes that a watershed management strategy must enhance and restore watershed ecosystems in order to optimize the natural resources of the State for all beneficial economic, environmental, and social uses.

RNM districts have divided their lands into analytical watersheds using a watershed condition index to measure current and future conditions. The State supports this strategy, in principle, as it should help RNM to achieve State objectives for water and wildlife resources on lands they administer.

Planning by analytical watersheds serves several very important functions. First, it allows district specialists the opportunity to plan management activities on a much smaller, more workable,

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- a. RNM should display severely impaired streams identified by OPR's 1988 Oregon Watershed Assessment of Pesticide Sources by Water Pollution Control Agency. This would better indicate existing on-the-ground conditions in the many subwatersheds within a single analytical watershed and provide more meaning to RNM predictions of future watershed condition.

- b. Watersheds should be classified and prioritized according to current functional and ecological conditions and importance for sustaining viable wildlife populations. Watershed-specific standards should be developed, in cooperation with adjacent landowners, to restore or maintain watershed conditions. A prescriptive approach may be used which would include establishing riparian management areas of sufficient width to achieve restoration on streams in poor condition. Districts should place a high priority for restoration on these watersheds. The State and other interest groups should be included in restoration plans. We commend the Medford District for adopting an aggressive approach to watershed/riparian area restoration by developing watershed management plans for 24 streams.

- c. RNM should analyze the relationship between calculated watershed condition indices and current flow and water quality conditions. This should enable RNM to test the validity of the rating system. RNM should use existing environmental assessment information to validate watershed condition index values as much as possible. Additional discussion on how RNM developed and used the watershed condition index in their planning process should be included in the final plans.

- d. Management activities should be monitored on each watershed to determine the cumulative effects on water, soil, fish, wildlife, and other resources. It will be difficult to accurately monitor watersheds where RNM manages only a small portion of the land base. The State strongly encourages cooperation and communication between landowners in multiple watershed monitoring for protection of riparian areas, evaluation of watershed condition, land management planning, and watershed monitoring for protection of riparian areas, water quality, and fish and riparian-dependent wildlife.

Monitoring of multiple generally watershed further would serve as a benchmark for comparison with other watersheds with greater RNM ownership.

We commend the Medford District for recognizing watersheds and riparian areas with high cumulative effects. The district has 28 watersheds with 28,000 acres of riparian habitat for the next ten years because of poor watershed conditions.

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### 5. Riparian Area Management

Water and associated streamside vegetation supply a unique ecological function. Riparian areas have the potential to diversify environment and provide habitat for many fish and wildlife species inhabiting RNM lands. Riparian areas also function as corridors between RNM's Old Growth Redwood Areas and other sources of biological diversity within a landscape context.

The State's goal for riparian areas is to protect, maintain and restore (where necessary) long-term aquatic productivity and the recreational and ecological values of adjacent terrestrial areas directly influencing aquatic systems. This should be accomplished by establishing standards for relevant factors which affect attainment of the State goal.

RNM districts have inventoried streams within their specific administrative area. Stream miles by order, acres of riparian area (mostly order 1 and above), pollution type and severity, and vegetative classes have been identified and summarized in the draft RNM documents. We commend the State for this effort, as it is about the stage for programs designed to improve watershed/riparian ecosystems.

We would recognize the Klamath Falls Resource Area's commitment to produce a Watershed Management Practices Guide. While the content of this guide was not outlined in the draft plan, it could serve as an innovative approach toward meeting desired water quality goals. One item that we would encourage the Resource Area to reevaluate in their guide is the protection standards proposed around lakes which is less than other western Oregon RNM plans.

The importance of protecting riparian areas cannot be over-emphasized. Several recent studies by a combination of federal and state agencies, Tribes, and others have surfaced in response to the declining fishery resources in Oregon, studies by ODFW through Oregon State University, Scientific Panel on Later-Successional Forest Ecosystems Report to the House of Representatives, Forest Service (Upper Klamath River Plan, Riparian Management Guide for the Willamette National Forest), and the State of Oregon (Draft Water Classification and Protection Project, and Anadromous Fishery Study) are just a few of the many studies recognizing the need for a greater understanding of watershed/riparian ecosystems and the fishery resources.

Considering the importance of riparian areas on RNM lands contributing to water quality, watershed/riparian fish and wildlife habitat, the State makes the following recommendations:

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Wildlife and water quality is needed. We believe that individual forest project plans should map and evaluate order 1 and 2 streams existing within the project boundary before a plan is implemented. If it is determined in pre-project planning that channel integrity or identified beneficial uses need protection, then appropriate protection (including riparian buffers) should be applied. Pre-project planning should also evaluate the potential cumulative effects that activities could have on the beneficial uses outside (subbasin level) of the project area.

Intermittent streams should be managed according to specific standards established for large woody debris recruitment, snags, shading, water quality (temperature and turbidity), microclimate, and critical habitat for wildlife and sensitive species. Disturbance of streamside vegetation and soil must be kept to a minimum. The standards may be accomplished by a variety of techniques depending upon the limited site leaving snags for wildlife trees along these streams, leaving hardwoods, noncommercial conifer trees and brush that occur along their having large woody debris placed in them during forest management activities, including logging, avoiding logging through them, and overall, maintaining and protecting the integrity of the watercourses.

- b. Riparian area buffers identified on-the-ground for protection of specific riparian area resources should have no-scheduled harvest planning. Harvesting within these riparian buffers must consider riparian management improvement projects, harvest corridors, fire control or other specific short-term projects. Stream logging within the riparian management areas should be discouraged except where detrimental environmental and/or structural (e.g., bridges or culverts) damage would be anticipated from leaving downed trees.
- i. While the State recognizes that the primary focus within riparian management areas on RNM lands will be streamside and associated vegetation, taking no action may not improve conditions within these areas, especially for large woody debris recruitment. As an example, the State is concerned about the large amount of debris currently on RNM lands. These hardwood stands currently do not have the near-term potential for producing sufficient quantities of quantity of coarse woody debris nor will they likely have that potential in the future unless riparian management (e.g., planting conifers within hardwood-dominated riparian areas) are taken.

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- a. RNM needs to define an expected future condition for their riparian management areas and provide management directed at maintaining or restoring this condition. The State recognizes that the riparian system is very dynamic and change with time due to catastrophic floods, wind, and other natural ecological processes.
- b. Standards should be established for all stream orders and should reflect functional and ecological differences between stream orders. At a minimum, these factors should ensure: long-term supply of large woody debris recruitment, snags, shading, water quality (temperature, turbidity), microclimate, and critical habitat for wildlife and sensitive species.
- c. Riparian area management needs to be addressed at the watershed or landscape level and should reflect the current conditions of riparian areas.
- d. Restoration of riparian areas identified in "poor" or deteriorating conditions should be a high priority.
- e. Riparian areas in "good" condition should be maintained in good condition.
- f. Riparian management areas (RMAs) should be an appropriate width to meet water quality standards, supply potential large woody debris (loading of complex wood structure in stream) and down wood (tons/acre in riparian management areas), and recognize and manage for sensitive riparian-dependent species within a landscape context.
- g. Buffer widths may vary depending upon overall watershed condition, stream order, beneficial use, acreage, impact to sensitive species, and physical characteristics within/adjacent to streamside area. Critical components that should be considered when developing buffer widths include, but are not limited to, overall watershed condition, shading (water temperature), sedimentation and turbidity, nutrient recycling, large woody debris, snags, and critical habitat for wildlife and sensitive species. RNM recognized some of these important ingredients when developing their riparian area protection policies.
- h. Concern has been expressed over protection of intermittent streams, mainly stream orders 1 and 2. Some have suggested (more accurate mapping is needed) that these streams may comprise as much as 75 percent of the total stream miles on RNM lands in western Oregon. The State recognizes that these smaller streams serve an important function for fish, wildlife and water quality. Greater knowledge through research on the importance of these streams to fish,

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For both woody debris and water quality problems, restoration projects, if implemented, should use adaptive management combined with intensive evaluation, monitoring, and data evaluation to determine long-term and short-term tradeoffs. Strict project standards followed up by evaluation and monitoring are the keys to a successful stream restoration program.

- j. Exclude livestock in grazing allotments where poor riparian area conditions have been identified until such time as the riparian area reaches good condition.
- k. Mining activities in or adjacent to streams should be managed in a way not to adversely impact riparian area vegetation and water quality.

### 6. Wetlands

RNM should increase its recognition of wetlands as a riparian resource in a manner consistent with the Bureau's Planning Bulletin, *Wetlands and Riparian Areas*. Recommendations that the State would suggest be included in the final plans are:

- a. Specifically name wetlands as features for which riparian management areas will be established.
- b. Specifically identify wetlands that will be restored or enhanced.
- c. Acknowledge the need to coordinate and cooperate with public and private landowners in the State in recognition of understanding in order to 1) develop a common inventory of wetlands; 2) establish criteria for determining wetland significance for protection or restoration; and 3) develop coordinated priorities to protect and restore public wetlands.
- d. Acknowledge that the preservation of wetlands on RNM lands makes a major contribution to the attainment of the Oregon Wetlands Goals on wetlands (i.e., 100 of 1990 Oregon wetlands will be preserved in the year 2000).

The State endorses the Medford District and the Klamath Falls Resource Area inventory of wetlands and recognition of wetlands one- to three-acre sites. This should set a standard that other districts should follow in their final plans.

### 7. Summary

RNM districts should develop and utilize comprehensive watershed management plans to improve water quality, water quantity, and fish and wildlife habitat within riparian areas. Continued

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research and cooperation among federal, state, tribes, and the private sector should be maintained in comparable riparian area conditions. Best Management Practices setting measurable standards and the identification and protection of unstable areas would further help maintain water quality. Monitoring, using measurable standards, is the key feedback technique for BMP implementation, effectiveness, and cumulative effects analysis.

#### D. Air Quality. How should BLM address the use of prescribed fire as a forest management tool in terms of the potential impacts on air quality?

The State supports a balanced ecological strategy for managing forests in Oregon. An ecological approach to forest management will entail a greater use of naturally occurring fire. Prescribed fire is going to be utilized by BLM as a forest management tool, state and federal air quality requirements must also continue to be met.

The draft BLM plans have stated that prescribed burning will be in accordance with the Oregon Department of Forestry (ODF) administered by DQO and the Oregon Smoke Management Plan (OSMP) administered by the Oregon Department of Agriculture. Incorporated into the OSMP is a goal for reducing emissions from prescribed burning by 50 percent by the year 2000.

#### 1. PM10 Nonattainment Areas

Prescribed burning and wildfires in west-side districts can affect air quality in both western and parts of central Oregon. Of particular concern are areas which do not meet state and federal health standards for small particulate matter (PM10). Currently these areas are Medford-Jackson, Klamath Falls, Grants Pass, Eugene-Springfield, and Oaxapope.

Although prescribed burning is not a significant contributor to PM10 levels in the areas noted above, there is still a need to minimize smoke impacts, in order to ensure that air quality standards are attained by the federal deadlines specified in the Clean Air Act. ODF has developed PM10 burning smoke impacts in these areas. The Department of Forestry's ODFP is directly tied into these PM10 control strategies.

#### 2. Prevention of Significant Deterioration

The State is also concerned about maintaining clean air in areas currently meeting air quality standards. Contributing prescribed burning impacts to approximate PM10 levels in these areas, leading to the nonattainment designation and development of control strategies as discussed above. In addition, the federal Clean Air Act contains pollution limits known as Prevention of

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Significant Deterioration increases which limit the amount of emissions that can be added to a "clean" airshed. If the allowed deterioration increment is consumed, then further growth must be restricted, such as new or existing major industrial sources of pollution.

#### 3. Visibility Protection

The State recognizes the importance of protecting federal Class I areas (wilderness areas and Greater Lake Mead area) from smoke impacts as a result of BLM prescribed burning in western Oregon. The federal Clean Air Act requires states to improve visibility in these Class I areas. Air quality monitoring in the Cascade has shown a 40-75 percent drop in visibility in many years. The Oregon Visibility Plan, developed by DQO in 1985, is the responsible for this progress and is closely linked to the OSMP.

#### 4. Summary

The State believes that the final BLM plans should specifically address each of the three issues noted above in order to ensure smoke impacts from prescribed burning would potentially occur. Any increases in prescribed burning resulting from the OSMP burning should be analyzed from an air quality standpoint.

In addition, the recent emergence of the forest health problem in central and eastern Oregon may expand the role of natural and prescribed burning on some of the forested land administered by BLM. The extent to which this could occur needs to be assessed prior to the start of any increased burning to ensure consistency with the Oregon's State Implementation Plan and OSMP. Continued coordination and communication among federal and state agencies in addressing these air quality concerns should be stressed.

#### 5. Tourism and Recreation. How should BLM manage for recreation, visual resources, and Wild and Scenic Rivers?

BLM lands contain a variety of significant natural resources of recreational value, including wildlife, wilderness, lakes, and rivers. These resources have existing and potential values for local residents and also serve as an attraction for tourists from outside a specific BLM district.

As Oregon's and the nation's population grows, the demand also grows for tourist attractions and outdoor recreation. At the same time, the State, in an effort to expand its economic base and to mitigate the effects of unemployment, is increasingly dependent upon timber and agriculture, increasingly emphasizing

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tourism, recreation, and the service industries which accompany them. Any long-range plan for BLM lands in Oregon should give due weight to diversified use of these lands if Oregon is to have balanced growth.

The State has addressed recreation uses and needs through outdoor recreation planning goals. The Oregon State Comprehensive Outdoor Recreation Plan (OSCRP), with the Oregon Outdoor Recreation Plan (OSRP), and the Department of Supply, Planning and Recreation's Needs Bulletin, provide comprehensive technical information and assessments for analyzing recreational growth and needs throughout the state. Part of the State's recreation plan (Appendix 1), titled Conservation on BLM Lands - State Position Paper, presents recommendations on improving recreational and tourism opportunities on BLM lands. We encourage districts to incorporate the State's recommendations and technical expertise when developing their final RMP/ESRs.

#### 1. Recreational Tourism

Many proposed recreational developments and management actions have direct impacts on the future of recreational tourism in Oregon. Several of these actions which BLM should consider in final plans include:

- Coordination with State and local governments on actions which may influence our regional strategies and Community Initiatives Program.
- Development of a multi-agency recreation planning program to promote regional recreational development and tourism.

The development of recreational/tourism strategies by State and federal governments and the private sector is an essential component of Oregon's plan to develop its economy.

#### 2. Wilderness/Recreational Values

The last OSMP projects demand for a variety of dispersed recreational activities. As identified in this document, merely considering activity demand is insufficient to address recreational diversity. Equally important is to consider the desired characteristics of the setting for a given activity. These characteristics in some cases have been defined in terms of the Recreational Opportunity Spectrum (ROS).

The Klamath Falls Resource Area was the only plan which recognized ROS to identify recreational uses. The plan also comments that on this effort and recommend that the five westside BLM districts incorporate this rating into their final plans.

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The OSMP analysis has identified a need to supply more "primitive" and "semiprimitive" recreational opportunities. While it is difficult to furnish this specific kind of recreational setting because of BLM's downstream responsibility, special Recreation Management Areas, located in critical environmental corridors, Outstanding Natural Areas, Research National Areas, and other areas, plus the fact that they may possess some of the characteristics needed for "primitive" and "semiprimitive" recreation. The State encourages districts, where appropriate, to use the ROS to identify "primitive" and "semiprimitive" recreational opportunities.

#### 3. Wilderness

BLM's Wilderness Study Area. -- BLM completed its Record of Decision for the Oregon wilderness study areas in October 1991. BLM's final decision package, which must be approved by Congress, recommended that 45 study areas encompassing 1.3 million acres be designated as wilderness. All but three of the wilderness study areas (two are included) are located east of the Cascade Mountains.

Soda Mountains is the only mainland BLM study area recommended for wilderness west of the Cascades. Located in the Harland Resource Area of the Medford District, it encompasses some 1,595 acres of which 5,687 acres are being proposed for wilderness.

Soda Mountain - Pilot Rock area is an extremely unique transition zone where coastal, high desert, Cascade and Sierra ecosystems converge. Because of its location, the State has a long history, many plant and animal species, not found anywhere else in Oregon, have become established. Soda Mountain also provides an important habitat for summering and wintering big game with much of the area identified as a designated Quaternary Ice Area by the U.S. Fish and Wildlife Service in the Draft Recovery Plan for the Northern Spotted Owl.

Even since BLM began evaluating sites for wilderness consideration, there has been strong public interest in expanding the Soda Mountain area. The Governor's Office has been visited Soda Mountain earlier this year to get a first-hand look at the area and discuss its status with local citizens and BLM.

Since the area is ecologically unique and due to a strong interest by the public, the State recommends that the proposed boundaries of BLM's Soda Mountain wilderness be further evaluated to determine if additional land should be wilderness beyond what has been recommended in BLM's Wilderness Study Report. Record of Decision. This evaluation should be conducted before final legislation is drafted for Congressional approval. BLM is

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encouraged to carefully manage the entire area of public interest, outside of BLM's proposed RM boundary, in order to protect its current ecological values and suitability for wilderness.

#### 4. Trails

The draft plan proposes significant additions to recreational trails on BLM lands. The State supports this direction especially for those trails leading recreational users to those allowing access to Special Recreation Management Areas, and those providing connectors to other recreational trails.

The State encourages each BLM district/Manatee Hills Resource Area to review recommendations for trail management in our recreation plan (Appendix II). Some of the issues noted in the paper include: develop trail plans within each proposed project area, buffering, appropriate signage, and implementing silvicultural practices to mitigate impacts. We urge that these recommendations be considered in the final plan.

#### 5. Recreational Recreation Areas

The preferred alternative proposes substantial increases in camping and day-use sites, in many cases more than doubling current provisions. We are very supportive of this increased emphasis. High priority for such development should be given to those sites supporting local recreational and tourism strategies.

#### 6. Wild and Scenic Rivers

The State gives a high priority to the Federal Wild and Scenic River program. It, along with the State's scenic waterway program, is critical in maintaining the natural resources and recreational values on Oregon's waters.

The following concerns have surfaced with all of the draft plans:

- The draft plans do not make it clear whether federal land management actions that potentially could have impacts on designated watersheds in the State system will be coordinated with the State.
- Technical procedures for determining river suitability were not sufficiently explained in the draft plans. Issues include percent of land ownership by BLM; the criterion used for ranking rivers as suitable; use of "Outstanding Remarkable Values" (ORV) in rating; and use of economic costs and local support criterion.

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Where neither scenic or recreational is an ORV, the VSM class should be determined through the individual planning process. For these rivers, visual resource management class III should be considered the minimum.

- In areas where more restrictive land allocations are already in place (e.g., primitive recreation, AOCs or Special Recreation Management Areas) the more restrictive standards should apply.

- BLM should concentrate on 1/4-mile corridor along rivers in developing plans for stream wild and scenic designation. BLM should also manage adjacent lands beyond the 1/4-mile boundary, where necessary to protect ORV.
- All values on eligible rivers should also be maintained at their current level for the plan period (10-15 years) or until Congress acts.

The State strongly encourages BLM districts to work with adjacent landowners, the State and the public when analyzing streams for designation. Additional pertinent comments regarding wild and scenic rivers can be found in the Department of Parks and Recreation's response found in Appendix 2.

#### 7. Off-Road Vehicles

Various forms of off-road driving are projected to increase in many of the draft plans. With their plans for major population centers, BLM lands are a major provider of this type of recreation in western Oregon.

Off-road vehicle recreation, while enjoyed by individuals and clubs, has created some land use controversy over the years on federal and state lands. To mitigate these potential problems, the State recommends that BLM districts include provisions in their final management plans for designating areas to meet off-road vehicle demand. We strongly recommend that off-road vehicles use be limited to a designated road management plan which should be developed by each district.

BLM should strengthen its standards and guidelines for off-road vehicle use. Resources should be published for off-road vehicle distribution showing locations where off-road vehicle use is permitted and explaining regulations on use.

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given the considerations noted above, the State believes that the methodologies used to determine suitability of wild and scenic rivers should be revised in preparing the final plan. We recognize that all the rivers found suitable are not necessarily suitable. But we believe that the current method used by BLM may not be adequate for making that determination.

Criteria that BLM districts should consider when analyzing suitability of rivers should include:

- Aggregated values of a given stream.
- Importance of aggregated values on both a statewide and county/regional level.
- Importance of smaller streams to program.
- Non-local as well as local support for a given stream.

Visual management on scenic rivers is best determined through the river planning process. This provides for comprehensive development of management standards for all values appropriate to a given river. Such standards should be based on the identified ORVs regardless of whether they are in the VSM class I or II resource management. The State recommends the following management/protection standards:

- No scheduled harvest (visual resource management) in river corridors, under its administration, designated as wild.
- Rivers or segments of rivers designated as scenic should be managed to maintain and provide recreation opportunities in a near-natural setting. While silvicultural practices could occur within the 1/4 mile corridor, these practices should not substantially impact the river or its immediate environment. Where scenic is an ORV currently meeting visual resource management (VSM) II, maintain the visual quality; likewise, where VSM II exists maintain and protect its scenic value. When VSM III exists, BLM should attempt to enhance visual quality to VSM II.
- River or segments of rivers designated as recreational should be managed to maintain ORVs for which they are designated while providing river-related recreational opportunities in a recreational setting. On rivers where scenic or recreational is identified as the ORV, standards should be implemented which would protect and enhance existing scenic conditions.

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#### 8. Scenic Highways

The public's perception of new BLM lands (and other ownerships) are assessed it in many cases determined by what people see as they travel the highways and hike the trails. This is a major reason for maintaining visual quality along roads, trails, developed recreational areas and other visually sensitive sites.

Scenic quality contributes to the increasing tourist industry in western Oregon. Hundreds of miles of State highways run through BLM-managed lands. Highways 25, 26, 35, 38, 42, 43, 129, 139, 140, 199, and Interstate 5 are just a few of the routes passing through BLM lands that are used by residents and out-of-state visitors. With this in mind, BLM districts should carefully consider scenic quality in their MPM/ESA.

It is recognized that maintaining continuity in visual quality on BLM lands is somewhat complicated by its checkerboard ownership. In many cases adjacent ownerships are intensively managing their resources without a high degree of visual quality in mind. This, however, has changed as revisions to the Oregon Forest Practices Act rule (ORS 327.430 Sections 12 and 17) have set visual standards and identified specific highways for visual protection. Visual quality most likely would be enhanced if the draft plans preferred alternatives were implemented.

BLM's draft plans have classified and are proposing visual protection standards for many sensitive areas (AOCs), SRDs, Wild and Scenic Rivers, and National and Regional travel corridors - Mt. Hood Corridor, I-5, Mary Peak Road, plus other recreational sites. The State supports the visual protection of sites presented in the preferred alternatives, and suggest BLM provide adequate visual protection along other visually sensitive highways.

The State recommends the following regarding visual quality:

- BLM districts should more precisely inventory and reevaluate their visual protection recommendations in the final plans. For major highways that pass through BLM lands, the analysis should identify those highways or highway segments appropriate for visual management. Existing visual conditions along these highways should be described, as well as the directives for long management plan to achieve expected future conditions.
- Scenic values along the major highways, cited above, should not fall below visual resource management (VSM) Class III. The State believes that VSM class IV (modification) would not retain the visual quality objectives along these important travel corridors. The application of new silvicultural concepts by BLM may help mitigate visual concerns.

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- c. Long-term visual management objectives should consider the use of silvicultural practices (e.g., silvicultural management or underburning) in order to accomplish the VSM objectives.
- d. RNM should work with adjacent landowners and others to maintain visual continuity.

The State supports RNM's Backcountry Buggy Program.

We also support Salem District's special protection for the Mt. Hood Highway corridor including land exchanges to promote visual quality.

With an increased interest in driving-for-pleasure, these designated routes will give the public sightseeing and wildlife viewing opportunities on the public wilderness by RNM.

#### g. Technical Issues

##### a. Estimates of Recreational Use

We understand that RNM does not currently estimate recreational use on lands under its jurisdiction. Therefore it used activity data derived from BLM's own data to estimate recreational use on proportional forested recreational land base for this planning period. We agree with this methodology, but we agree RNM to develop methods of use estimates more appropriate to RNM lands in the future.

##### b. Economic Valuations of Recreation

Analysis of the economic benefits of recreation use should be developed with values appropriate to RNM lands. For example, we understand current methodologies do not place economic value on recreational activities occurring within a RNM district produced by residents within that district. This would bias the transfer payment of recreation produced by a resident of one county recreating in another county. We urge that current recreational economic methodologies be reconsidered as the full value of recreation can be described in the final RMP.

##### f. Timber Management, Are RNM's timber growth and yield assumptions valid? How will silvicultural practices be used to meet projected harvest levels? Will RNM's timber production be based on the harvest levels predicted by local allocation? Has RNM conducted adequate forest health assessment?

Timber harvest on lands administered by RNM has been and will continue to be a major source of logs available to local mills throughout Oregon. Over the last ten years, 11 percent of the total volume harvested in Oregon has come from RNM lands. In

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A variety of techniques have been used to provide older age class forest. Old growth Siskiyou Area (OSGA) 1/4 is a 100 year rotation and density management to enhance older forest characteristic. Connective Areas (CA) are managed using 150- or 200-year rotations due to the numbers of overstory trees planned, we anticipate that management in the General Forest Management Plan will produce characteristics similar to older stands for about 2/3 of the rotation. RNM's efforts are innovative in that they attempt to maintain spotted oak habitat over time while still producing timber from the same land. This strategy is not without controversy, however, we believe that has been expressed over the sufficiency of this strategy to maintain dispersal habitat for spotted oak. We believe that management section of this coordinated response for a further discussion.)

The Medford District has divided its planning area into southern and northern management units based on site productivity, plant community, and forest condition. Proposed forest management prescriptions have been tailored to each area to better fit conditions on the ground. Variations in conventional forest management practices are also being proposed in forest-prone areas. The State compliments the district for this effort.

Implementation of uneven-aged management, especially in the Klamath Falls Resource Area's ponderosa pine and pine-ponderosa stands, is also supported by the State. Both the Medford District and Klamath Falls Resource Area section using uneven-aged management as a silvicultural management tool. A more comprehensive explanation would be helpful on how these, and possibly other districts, will implement uneven-aged management and how this differs from the various green tree retention standards being proposed in the preferred alternatives.

Our concern, which will be reiterated again in following sections, is the uncertain outcome of applying uneeded silvicultural prescriptions through biological diversity. It will take highly trained professionals to implement and monitor biological diversity to determine if the program is successful in meeting each district's (including western Oregon as a whole) expected objectives.

Adequate funding is necessary for a successful program. RNM is proposing a much higher level of intensive management (e.g., more frequent planning and pruning) than ever before. These activities have not been available for intensive management of the ponderosa, timber-ponderosa, and mixed-conifer forest types. We question how RNM intends to obtain the necessary funds to implement biological diversity with reduced harvest levels and higher predicted costs. RNM should evaluate the possible impacts on management programs and outputs (e.g., allowable sales quantity, or lower stand levels).

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1991, over 400 million board feet was harvested from Bureau lands which represents eight percent of the total volume harvested statewide. Forest management activities not only furnish jobs for local economies but also are an important revenue source for counties to support schools and roads.

RNM's legal mandate for managing its lands has come from the OGC Act and the Forest Land Policy and Management Act. These laws which were discussed in the Ecosystem Management section of this paper, directly address the management of lands administered by RNM. The OGC lands have been intensively managed over the last fifty years as directed by congressional mandate. Public domain lands administered under the Forest Land Policy and Management Act consider more multiple use policies.

#### 1. Forest Land Management

Under the current plan, forest management entails implementing mainly even-aged management (clear-cutting) followed by the application of intensive management practices (e.g., thinning, planting, fertilization, thinning, and controlling competing vegetation) on about 20 percent of the lands each year. The primary objective is to intensively manage forest stands to reestablish the forested lands to a perpetuated base of high quality forest with sustained yield basis. Other species are favored depending upon ecoregion within districts.

Implementation of this strategy represented accepted forest management practices for managing western Oregon forests in the past. Recently, however, these practices have been questioned due to air and water quality problems and protection of sensitive, threatened, and endangered species plus other concerns. This has required RNM and other forest landowners to reassess their approaches to resource management.

In the draft plan, RNM is proposing to meet this challenge by adopting an ecosystem approach to forest management known as biological diversity. Biological diversity represents a significant change from RNM's current management philosophy. While there are questions about the legal sufficiency of this new strategy in meeting the OGC Act, the State believes that biological diversity goes a long way toward addressing concerns about forest health and maintaining productive ecosystems.

The preferred alternatives are designed to produce nature and older forests over time. Because less older forests will be removed on direct private lands, we are concerned that the checkerboard ownership pattern makes it unlikely that the objectives for management will be achieved. In order to produce the desired future condition of major forest areas, nearly complete watershed-level ownership is necessary.

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We direct your attention to the Department of Forestry's response (Appendix 2) and Oregon State University's Report (Appendix 3) for more detailed comments specific to individual RNM districts/resource area.

#### 2. Land Suitability

RNM districts have inventoried their lands by using a system known as the Timber Production Classification System (TPC). GIS mapping has helped identify the various TPC classifications. According to the draft plan, the inventory districts have assessed the physical and biological capabilities of the lands to support and produce forest products on a stand-by-stand basis. Some 2 million acres were identified as suitable in western Oregon/Klamath Falls Resource Area of which 1.1 million hectares would be managed for varying degrees of timber harvest. Less than 1 million acres alternative. Other land allocations (e.g., Old Growth Ponderosa and Connectivity areas) would allow less intensive timber production as compared to the general forest allocation.

The State recommends that RNM, using data obtained from the Forest Inventory research project, Department of Forestry, and other studies, continue to validate the accuracy of data obtained from its inventory program and further evaluate lands currently determined to be unsuitable. If it can be determined that some of these lands can be managed for timber production, they should be returned to the suitable base. Likewise, lands in the suitable base which are determined to be unsuitable through monitoring, should be taken out of the base.

Comments regarding RNM's TPC inventory system are found in Appendix 3 -- Oregon State University's Report (page 43).

#### 3. Growth and Yield Assumptions

Estimation of the sustainable yield level is highly dependent upon a number of assumptions including land base, growth, inventory, management activities, and growth and yield assumptions. If the assumptions are not realistic, the yield may find in the decades ahead that either the harvest level was not sustainable or that the harvest level was less than could have been realized.

The allowable sales quantity (ASQ) on each RNM district was calculated using a computer program that uses district data and a combination of the growth and yield models (Stand Projection System -- SPR and YIELDPRO) for estimating future yields from managed forest stands.

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Several questions have been raised regarding RNM's extensive inventory system (including sampling reliability, drift design, and intensity methods). Concerns have also been expressed regarding RNM's application of the (a) even-aged Douglas-fir or western hemlock calibrated models, to stands where green trees will be maintained.

None of the draft plans noted that the preferred alternative includes many elements which are recognized to be substantially untested modeling of sustained yield as compared to other alternatives presented. It is further noted that the level of confidence in yield and harvest values is lower than other alternatives.

The State is concerned that ASQ levels predicted in the draft plan may be inflated estimates of the actual volume that can be expected. Questions regarding inventory design, the index equations, volume and taper equations, growth and yield from intensive management practices, minimum harvest ages, and empirical yield tables need to be discussed in more detail in RNM's final plan. Further analysis should also be conducted on the allowable cut effort of deferring for 10 years some of the trees even though they remain in the timber base.

The State will direct RNM's attention to Oregon State University's Report on growth and yield in Appendix 3.

#### 4. Forest Health

Deteriorating forest health conditions can be visually detected as one travels in eastern Oregon. Forest health is also a serious concern in western Oregon forests where insect and disease mortality is very common. Forest health conditions influence the amount of timber yield sustained over time, the ability to maintain critical fish and wildlife habitat, and the maintenance and development of recreation opportunities on all forest lands regardless of ownership.

RNM's draft plans fail to adequately address forest health issues which have recently received both public and political attention. In most of the plans, forest health is not mentioned in the goals or objectives of the proposed management measures to be implemented and Planash Falls draft plans focus the clearest to addressing health problems and solutions.

The State recommends that RNM's final plans set specific goals and objectives including monitoring detailing how management strategies of the preferred alternative will address forest health problems and what mitigative measures will be implemented to improve unsatisfactory forest conditions on RNM lands. We encourage RNM to work with other Oregon landowners to improve forest health.

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nature of federal funding of forest management activities and the difficulties of securing funding for these activities over the next several decades.

a. Timber supply is the primary driver of the RNM socio-economic analysis but does not appear to be an important part of alternative formulation in the draft plans. One would have expected RNM to use this analysis as an integral part of developing plan alternatives; the potential exists to use the analysis as a key decision criterion for the record of decisions.

f. The Bureau appears to have used a harvest flow constraint to find a harvest level that can be sustained over time. This process is a fairly rational approach to regulation when trying to balance stability goals with forest regulation goals. RNM did not do so in its sensitivity analysis on alternative flow constraints. In light of concerns for community stability, RNM might want to present a "adaptive alternative" in the final plan.

g. Wildlife Management. How should RNM disperse mammals for big game? What zone levels should RNM consider for various dependent birds and other wildlife? How should sensitive, threatened and endangered wildlife species be managed?

#### 1. Deer and Elk Habitat

Big game is an extremely important resource which depends on cover and forage found on RNM administered lands. Big game provides recreation to the public in the form of hunting and viewing opportunities. The Deer's Great Elk Viewing area is an example of RNM's concern for big game habitat, to develop an interpretive roadside program for elk and other wildlife.

RNM districts have appropriately utilized the Wisdom Model in determining big game habitat conditions. However, RNM has not stated how it would improve habitat effectiveness (HE) for big game in areas with low HE indices.

#### e. Cover

Cover is one of the critical components that needs to be available on RNM lands if management objectives (i.e., HE indices and number of animals) set by the Oregon Department of Fish and Wildlife (ODFW) are to be achieved. Cover, which includes the heterogeneity of optimal, thermal, and habitat cover, is used evaluated in the draft RNM plans. Existing cover conditions were rated as marginal in most of the big game management emphasis areas.

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#### 5. Timber Supply

The primary driver of RNM's socio-economic analysis is timber supply. RNM used an iterative approach to model timber supply. This approach has much merit. However, some basic assumptions need to be revisited and the analysis for the final plans should reflect a more uncertain picture of timber supply in Oregon. In addition, RNM should explain how the timber supply analysis was used in formulating the record of decisions. Please review the Department of Forestry's draft response found in Appendix 3 for more details.

A summary of the concerns and recommendations regarding timber supply include:

- Due to the uncertainty in timber supply, it is reasonable to assume that stumpage prices will increase substantially more than has been predicted in the draft plans. We encourage RNM to reevaluate the stumpage prices used in its analysis to better align them with current projections.
- Overall, analysis of the timber supply situation is more optimistic than warranted. The draft plans portray what is likely to be an upper level of timber supply. Additional scenarios should be portrayed reflecting lower potential harvests from private owners, the forest services, and forests managed by the Oregon Department of Forestry. Uncertainty about the probability of implementing planned RNM timber sale levels should also be documented.
- The public's sensitivity toward harvesting younger stands (50-60 years) of timber may force RNM to reconsider late seasonal management regimes. Current restrictions on federal lands have caused increased harvesting of smaller diameter logs on private lands. This translates into lower rotations on RNM lands than would otherwise be the case. RNM should evaluate the effects of longer rotations and higher minimum harvest ages on all lands managed by RNM.
- Timber sale quantities are highly dependent upon intensive management activities yet, historically, RNM management activity accomplishments are well below planned levels.

Levels of management practices on RNM forest lands are dependent upon levels of federal funding. These appropriated funds have, most of the time, been sufficient to insure adequate regeneration of cutover stands but have not been sufficient to take advantage of opportunities to significantly increase growth levels of the Bureau's Oregon forest lands. Planning for socio-economic impacts of projected timber supply levels should consider the unstable

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The reason given for these marginal conditions is past forest management practices on RNM and adjacent private lands. Under their preferred alternative, RNM districts are predicting no change in the short term for cover conditions. Cover conditions would improve in the long-term in the OODAs but would remain marginal in the general forest area. The State is concerned about long-term marginal conditions in the general forest.

The final RNM should address how RNM proposes to improve survival cover conditions and to meet HE and hard number objectives. RNM should work with ODFW on meeting these management objectives.

#### b. Forage

Forage quality and availability are also important elements necessary for big game survival. Like cover, RNM draft plans indicate marginal forage conditions in most of the private areas/analytical watershed. Lack of forage or poor forage quality has led to deer and elk slipping onto private lands leading to land use conflicts. RNM districts have mentioned the need for forage seeding on some RNM lands. For example, Coos Bay, in particular, is planning to seed up to 50 percent of the acres harvested each year.

RNM districts should consider the following recommendations on forage in their final plans:

- The final RNM should address how RNM proposes to improve marginal forage conditions and to meet State HE and hard number objectives. RNM should work with ODFW on meeting these management objectives.
- Expend, where feasible, the forage seeding program to benefit big game. RNM should increase its effort to search out and/or create native grass and legume seed sources for forage seedlings suitable to big game species.
- RNM should fund forage seeding through timber sale receipts.
- RNM districts, in particular the Planash Falls Resource Area, should structure grazing allotment plans to mitigate forage conflicts that may arise between livestock and big game. Alternatives such as shortening livestock grazing periods in the fall to allow green-up for winter forage may be helpful in defusing forage problems.

#### c. Roads

A plan to manage roads in a responsible manner is perhaps the most powerful management tool RNM has to benefit big game in western Oregon. Open roads allow easier access to big game herds

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and other wildlife. This accessibility has exposed deer and elk to greater human-caused disturbances. Big game must expend more energy to seek hiding cover from hunters and others when open road densities are high.

Open-road densities exceeding 4 miles/square mile are common on all of the RMN districts. Disturbance to big game habitat caused by a high density of open roads has been well documented. We direct your attention to the roads management section, Appendix 1.

## 2. Stems and Dead-and-Domed Wood

Dead and down woody material is increasingly recognized as an important component of the forest ecosystem. RMN should provide enough "wildlife trees" to maintain viable populations of birds and other wildlife. Additional steps should be taken to ensure the development of stems over time.

Green trees should be left on regeneration units to provide future snags. RMN districts are committed to programs to leave 6-20 green trees per acre. However, residual green trees left on harvest units may not be long lived or may blow down much too soon to be unavailable in the future. Thus, it may be necessary to snags or blast out the tops of green trees over time in order to produce snags to support desired population levels.

RMN should have concrete proposals to create snags including estimated budgets and work-volume requirements. RMN should also adjust AUMs to account for these created snags over time. RMN should fund research to determine whether artificially created snags have the same utility for wildlife as those produced naturally.

The State supports RMN's proposals for retention of dead-and-domed wood. Where feasible, RMN should provide downed logs greater than 14" diameter at a minimum rate of 2/acre. RMN should include the retention of target levels of dead-and-domed wood in management plans for planned timber sales. RMN should establish a monitoring system to ensure that target levels are attained.

## 3. Sensitive, Threatened and Endangered Species

### a. Spotted Owl

The northern spotted owl was listed as a threatened species on June 29, 1990 as it was determined that declining habitat conditions were leading to possible extinction. Several conservation strategies have been developed, most notably the Interagency Scientific Committee's (ISC) Report and the Draft Recovery Plan, to address the northern spotted owl's recovery.

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width, current fragmentation of habitat within the corridor, the effect of timber harvest on current and future habitat needs including anticipated plan size, land ownership pattern, and different riparian needs of wildlife. RMN should address these factors in their final plans.

Intensive management of the forest landscape has created the current stand conditions that exist today. To reach conditions we desire in the future may require some manipulation (less intensive than in the past) of forest stands to hasten old growth/nature forest conditions.

It is the responsibility of the US Fish and Wildlife Service to determine whether RMN plans comply with the Endangered Species Act. The State supports the general principles and overall approach taken in the Draft Recovery Plan for the Spotted Owl as a means toward resolving the present impasse. The Final Recovery Plan for the Northern Spotted Owl, due to be released in 1993, should be adopted by RMN unless the U.S. Fish and Wildlife Service determines that RMN's land management strategy is adequate for protecting the spotted owl.

### b. Bald Eagle

The State concludes that the implementation guidelines for the bald eagle recovery plan have been met by the districts. However, OWF is concerned that the bald eagle nesting area in the Sycamore block which has apparently received no specific protection in the Salem Draft RMP. We would ask RMN to contact OWF regarding this specific bald eagle area.

### c. Marbled Murrelet

With the recent listing of the marbled murrelet as a threatened species under the Endangered Species Act, RMN must provide an in-depth analysis of the effects of the alternatives on this species. The definition for suitable habitat we currently use by RMN must be further refined and the latest scientific information. From an operational context, the State recommends RMN expand murrelet inventories and take interim measures to protect suitable habitat.

### d. Other Sensitive Wildlife Species

Additional concerns have been expressed by OWF and others on populations of other Oregon sensitive species (e.g., neotropical bird) that may be impacted by the proposed alternatives. This concern especially applies to the general land management area where the impacts of the alternatives on these species may be severe, but applies to other allocations as well. The final RMPs need to provide clear direction for RMN

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A Recovery Team was appointed by Secretary of the Interior to develop a recovery plan that would consider the habitat for the spotted owl and maintain fish and wildlife and implementing a recovery plan. The State has a major role in the implementation of the Recovery Team and has contributed support from several State agencies to the process.

RMN's draft preferred alternative proposes to address spotted owl and other critical species through application of ecosystem management principles. The overall intent of this strategy according to RMN is "to manage lands to contribute to community stability consistent with maintenance of ecosystem and diversity of species" contribute to long-term recovery of the northern spotted owl and maintain fish and wildlife and recreation, scenic and other resources. The objective is to maintain many of the old growth/nature forest components necessary for the spotted owl and other species while permitting the production of a suitable level of goods and services on lands available for timber harvest.

As noted in the Old Growth and Mature Forest section of the coordinated response, RMN has taken various steps to maintain and producing mature/old growth stand conditions. The concepts involve around creating Old Growth Redwood Areas (OGAs) and Connectivity Areas (CAs) and Kinship Forest Resources Areas (KFRAs) scattered throughout the districts.

RMN's Salem District has identified three classes of OGAs and two types of CAs in an effort to maintain/produce older forest structure. The preferred alternative strategy for OGAs 3 (Mature/old growth) is selling for more intensive management than in OGAs 1 blocks. Due to the current stand structure existing in the Matures/old growth, there is a need to accelerate older forest conditions. While this need is recognized, there is a concern that the management scenario being proposed is untested and possibly too aggressive. Thus it may not meet the intent of the spotted owl recovery plan. The Governor's Planning Team and State agencies recently visited the site with RMN resource area managers to discuss proposed management prescriptions under the preferred alternative.

Other concerns have also surfaced regarding the retention of existing stands of old growth and whether or not RMN's older forest strategy will be sufficient to meet riparian habitat needs of the spotted owl. Furthermore, RMN has not done a risk analysis on developed conditions the site with RMN resource area managers to discuss proposed management prescriptions under the preferred alternative.

The effectiveness of CAs as corridors for wildlife movement has not been adequately addressed. RMN must address the factors that may affect the utility of these areas including their

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specific protection of these species including information on protection of nest sites and other important habitat areas. RMN should take no action which would contribute to the listing of sensitive species. RMN should inventory sensitive species occurring on their lands, initiate impacts on sensitive species resulting from management actions, and monitor to assess the impacts of actions on sensitive species.

### h. Old Growth and Mature Forest - How will RMN manage its forests to maintain old growth and mature forest?

When people think of forests, they may envision majestic old growth. These old growth stands provide habitat for many wildlife species and furnish a variety of recreational experiences.

Old growth is also still important to the timber industry. Because of its size and the quality of the wood, these areas are especially prized by industry.

According to the RMN's 1988 extensive stand inventory, there are over 190,000 acres of existing old growth (200 year old) in the western Oregon districts. While various land allocations being proposed in each district's preferred alternative are not all made of these stands (e.g., Special Areas, wild and scenic river corridors, riparian habitat, and old growth), many old growth stands would remain in the general forest allocation. According to the draft plan's preferred alternative, some 100,000 acres of old growth in total would be harvested in the first decade of plan implementation.

RMN districts are proposing several different techniques to maintain/produce old growth forests. OGAs 1's use 100 year rotations and density management to accelerate older forest characteristics. CAs are managed using 100- or 125-year rotations. Kinship Forest Resources Areas' preferred alternative is to use 100- or 125-year rotations. RMN also has old growth surrounded by a 1/4 mile buffer to maintain old growth in the western portion of their recovery plan. Reserved areas (e.g., depending upon the land allocation) and other old growth components (large and downed woody material) are left on units within the general forest allocation or nonreserved OGAs and CAs.

RMN's biological diversity position is innovative but untested in that it will attempt to maintain old growth characteristics for the spotted owl and other sensitive species. According to the RMN's Executive Summary, 215,000 acres of old growth would be remaining after 10 years; 412,000 acres after 100

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year would be considered old growth. This would be an allowed increase in total acres from the current inventory of 200,000 acres.

While the State supports RM's approach to maintaining and protecting old growth stands through biological diversity, we are concerned about the impact that harvesting will have on old growth dependent species. We further realize that the harvest from these stands represent the most predictable portion of the allowable sales quantity in those uncertain times of timber supply.

The State's concern focuses on RM's proposed harvest of old growth in the general forest allocation for the preferred alternative. More specifically, there is currently a shortfall of biological diversity opportunities existing in the Coast Range due to human and natural disturbances. Most watersheds in the Rugged, Seien and Coos Bay Districts lack older-age components necessary to maintain ecosystem management. Harvesting of old growth within the general forest allocation will further exacerbate the problem unless mitigative measures are considered.

The State believes that one solution to this problem would be to maintain within each third-order watershed example(s) of ecologically significant older forest stands. These stands should represent RM 447 criteria, or if no stands having these characteristics are present, then natural stands would be significant salvage or thinning histories. Protection of such stands will offer refuge for associated wildlife species, and may allow them to expand their distribution and populations as younger stands in the surrounding area mature over time. Other possible solutions should also be analyzed in an effort to address this concern.

The State recommends that RM further evaluate the impacts on biological diversity (genetic, species, ecosystem, landscape) in the Coast Range from harvesting old growth in the general forest allocation in the preferred alternative. RM should further develop and analyze other alternatives which retain biologically significant old growth stands while still producing economic opportunities. Consequently, Alternative E's old growth strategy could not be a benchmark for other alternatives regarding old growth retention.

#### 1. Livestock Management - How will RM manage its grazing lands to produce forage for livestock and wildlife while protecting other resource values in its National Public Lands?

Ranches located near land administered by RM and the Forest Service, in many cases, depend upon livestock grazing from these lands. Historically, nearby outdoor ranges in poor condition public lands as summer pasture and utilize home ranches to grow

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irrigated hay for winter feed. Declines in livestock forage from the RM could have an effect on local ranchers. A decline in the economic stability of local ranches would create economic hardship on the community and in the surrounding area.

The State's recommendations outlined below recognize the economic and cultural facets of the livestock industry by proposing a program that we believe will ensure the long run, sustainable use of RM lands by livestock while protecting sensitive resource values located on these lands. Most western Oregon RM districts have limited grazing programs on their lands, with the exception of Klamath Falls Resource Area. While most of the following comments and recommendations refer to the Klamath Falls Resource Area, they are also applicable to all RM districts where grazing is permitted.

The Klamath Falls Resource Area currently has some 95 grazing allotments (41 permittees/leases) producing 11,849 Animal Unit Months (AUMs) of forage annually. An additional 5,000 AUMs are classified as suspended non-use. According to the draft Klamath Falls RM/EIS and personal communications with RM staff, range managers (using a core base) have evaluated the impact of grazing on other resource values, especially streamside habitat and big game forage needs.

The Klamath Falls Resource Area has identified some 14 allotments in need of improvement. These allotments represent about 91 percent of the total allotted grazing acres on the east side and 58 percent on the west side. In total, this represents some 87 percent of the allotted AUMs.

Klamath Falls' draft preferred alternative proposes that 13,185 AUMs per year be available which represents a decline of 8 percent from the current level. Justification for the decrease is based upon a need to develop upland water developments, improved riparian area conditions and improve forage for both livestock and wildlife.

We have several concerns regarding livestock management. First, there seems to be a large number of allotments which lack comprehensive allotment management plans. Without a plan for each allotment, combined with an aggressive monitoring program, how can the Klamath Falls Resource Area hope to improve unsatisfactory conditions in allotments currently needing rehabilitation? Will allotments identified as (1) in the plan become high priority for improvements when funding is available? While the core base approach used to identify resource conflicts in allotments is a good start, it should not be considered a substitute for allotment management plans. Without allotment management plans and monitoring, degradation of the very values the Klamath Falls Resource Area is trying to protect or maintain could continue unchecked.

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Furthermore, the Klamath plan permits annual grazing in riparian areas with currently less than good conditions. RM should not allow grazing in such degraded areas except under strictly controlled management. If RM cannot document initial recovery, they should change their grazing strategy or consider no grazing until recovery is achieved. The Governor's Watershed Enhancement Board wants to promote cooperative projects between the RM and private owners where riparian areas cross mixed ownership.

The State is also concerned about livestock impacts on fish and wildlife, with special emphasis on the Lost River and short-nosed suckers, big game, sage grouse, and other riparian dependent species.

The State supports a livestock management program which allows grazing while protecting resource values (i.e., water quality and fish and wildlife habitat). Considering the need to more carefully control livestock grazing in riparian areas and improve forage conditions on several of the allotments, we believe the proposed short-term decline in AUMs seems justified. The State favors additional reduction of AUMs when resource degradation is apparent.

As part of the range management program RM should:

1. Develop allotment management plans for every allotment.
2. Monitor allotment plans on a regular schedule.
3. Activate range improvement projects (seeding, water development, and prescribed burning) that will both increase forage productivity and draw livestock toward lands not currently treated and away from riparian areas in poor condition.
4. Implement grazing systems such as seasonal use and deferred rotation grazing that better fit the livestock to the resource.
5. Attract livestock away from riparian areas by:
  - developing other water sources
  - planting salt tolerant vegetation in riparian areas
  - planting other palatable vegetation
6. Limit livestock use in riparian areas to periods when forage and soils are most resilient and to uses determined by site-specific conditions.
7. Exclude livestock until the recovery of riparian area vegetation (to a good condition) is enough to allow managed grazing.

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8. Maintain and protect streams in "good" condition; restore streams in "poor" condition.
9. Secure a stable funding source for livestock management programs.

Short-term declines in AUMs may occur on specific sites, but production should stabilize and, perhaps, even increase over the long-run once stream and rangeland conditions improve and problems of redistribution and grazing administration are addressed successfully. Frequent monitoring of allotment plans, as proposed by RM, will detect resource problems. Grazing strategies should then be adjusted where needed.

RM already has one key to success for benefiting forage use with the protection and rehabilitation of the resource base: the generally improving flow of information and ideas among its staff, the Forest Service, permittees, and other resource users.

Two other success factors in this effort are the rapport between RM and most allotment holders, and the expert help available from local soil and water conservation districts and conservation groups. Several RM sponsored grazing projects in eastern Oregon (e.g., Camp Creek) have shown that proper grazing management can support livestock while protecting other resources.

The State believes that local people continuing to work together in a cooperative spirit, rewarded by watershed, will pay off in better resource management and an improved livestock industry.

#### 2. Minerals and Energy - How should RM recognize and manage

Mineral and energy resources can be found on many lands administered by RM. These valuable resources may include locatable minerals (oil, gas, coal), locatable and other precious metals and soluble minerals (rock and aggregate resources). The location/extent of mineral and energy resources upon the physiographic region. RM administers both mineral estate and split estate lands.

While districts have discussed mineral and energy resources in their draft plans it is difficult to determine the location of these resources. In particular, State-owned mineral rights underlying RM surface ownership have not been identified.

The State makes the following recommendations to RM regarding minerals and energy which should be considered when developing the final RM/EIS:

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- Each one of the final plans should: a) acknowledge any state-owned mineral rights (list legal descriptions); and b) preserve, whenever possible, access to existing valid mineral rights.

At the very least, the State believes that the management of severed estates with state-owned mineral rights should be specifically addressed and that the management direction offer the greatest possible latitude to the State.

- BLM districts should recognize energy and minerals as an important resource when making land management allocations. Land available for mineral and energy exploration and development should be kept at the highest level environmentally possible in the preferred alternatives. Decisions to withdraw lands should be based on an open analysis with proper accommodation of current environmental protection and reclamation requirements.
- There is a need to better quantify the value of the resources and to factor the resource value into the BLM alternatives. Specifically, mineral withdrawal's have been made without the benefit of a mineral inventory. Such an inventory should be conducted before withdrawals are recommended.

- For all districts, the State encourages BLM to provide realistic opportunities for mineral exploration and development. Mining overlay zones and explicit standards and procedures to allow mining in other land allocations are viable mechanisms to use to mitigate conflicts.

While budgeting for mineral assessments has been a problem for BLM, the Department of Geology and Mineral Industries stands ready to assist districts in assessing the mineral potential on their lands.

#### K. Socio-economic. How will the adopted plan affect economic opportunities in surrounding communities? What impact will the plan have on socio-economic stability in the planning area and statewide?

The long-term socio-economic goals of Oregon's state government and its people are spelled out in Oregon's Recreation/Leisure Sustainable Standards for Progress. The State recognizes the need to diversify its economy, particularly in the non-polluting areas. The plans as specified in the draft files are not inconsistent with this goal. However, the State recognizes that the impacts of the proposed timber harvest reductions, the State's highest priority strategy (see Appendix 1 for Land Benchmarks) in the two major areas are put at substantial risk.

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Over the last year the Governor's Forest Planning Team has worked with BLM at the State and district levels to better understand and make recommendations on socio-economic impacts of proposed BLM management decisions. The State's review of BLM's socio-economic analysis is based upon a paper titled: Socioeconomic Issues and Bureau of Land Management Planning transmitted to BLM from Governor Roberts in May 1991. (see Appendix 1) This paper describes the economic and social analysis the State would like to see presented in each BLM plan. More additional comments in Appendix 2 (Employment Division) and Appendix 3 (Oregon State University Report).

#### 1. Socio-Economic Conditions

The State commands BLM for analyzing migration trends, unemployment rates and the economic structure of the regional economy. We question, however, the multipliers used by BLM in calculating direct timber and timber management jobs. To strengthen this analysis, we recommend the following additions and further evaluations:

- Single economic base analysis showing export base for counties in each district.
- Demographic and occupational profiles for communities likely to be impacted.
- Occupational profile of displaced workers.
- Reevaluate (using a consistent set of models) the impacts to total employment of harvest reductions.
- Expand mitigation discussion to include the adverse socioeconomic impacts of the plans and ways to lessen impacts.

The final BLM plans should also update the economic data presented in the draft plans to reflect more current information. (see Appendix 3 for a more detailed discussion).

#### 2. Community Stability

We agree with BLM that impacts on communities will vary within each district and across districts. A more detailed analysis is needed which would allow BLM to systematically evaluate the impact of harvest reductions on areas not only within but also outside the districts. In other words, the plans should estimate the preferred alternative impact on community stability based on the structure, occupational mix and demographics of communities.

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- Economic Benchmarks** -- the goal of reaching the national average in per capita income particularly for regions outside of the major metropolitan areas and regional job distribution are severely impacted by the preferred alternative.
- Social Benchmarks** (specified as Benchmarks for People) -- achievement of goals relating to drug use, social harmony and job security. It should be noted that a structural economic change which will result from the preferred alternative.

The State calls on BLM to provide the analytical ground work for an effective policy response to the fundamental social and economic changes which would follow the implementation of the preferred alternative.

The economic and social conditions throughout Oregon are a major concern for the State. The management decisions taken on federal lands affect the economic and social welfare not only in nearby communities, but also the State as a whole.

Land administered by BLM in western Oregon make a significant contribution to the economy of Oregon. State and local governments receive monies from management activities (mostly timber harvest) on BLM lands. BLM manages both Public Domain and Oregon and California (OCL) lands. Some 50 percent of revenues generated by timber receipts on OCL lands is given to western Oregon counties.

Many Oregon counties are very dependent upon revenues from federal lands which help finance schools, roads and local government. Douglas County, for example, derives over 10 percent of its revenues from BLM and Forest Service timber receipts. Josephine County, is percent and Coos County, 14 percent. In 1991 alone, Oregon counties received some \$60 million from timber receipts from OCL lands. The five-year average (1981-1985) of OCL payments to counties was \$81 million a year.

Other direct revenues payments are also generated from the management of BLM lands. These revenues include mineral and grazing leases and in lieu of tax (public domain lands only) payments. Recreation (fishing, hunting, other recreational activities) on these lands also generates indirect revenues to local communities.

Declining timber harvests over the last two years have meant increased unemployment in timber-dependent communities throughout the State. Increased social problems, and decreased county revenues. To address these problems, the State responded to BLM's Analysis of the Management Situation noting our concerns and making recommendations on how to analyze socio-economic impacts.

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#### 3. Social Impacts

Social impacts are briefly mentioned in the plans, but there is no effort to systematically analyze the likely impacts. We recommend using appropriate models (note comments from State Economic -- Appendix 2) to measure the social impacts. The key impact that needs to be addressed is an inventory of social impacts.

#### 4. Recreation/Tourism Industry

In an attempt to diversify the economy of Oregon, the State supports an aggressive recreational/tourism program on BLM lands. While the recreation/tourism industry will not fully replace the personal income levels and employment opportunities that timber industry jobs produce, it still should help isolated communities in this transition period. Recreational programs sponsored by the State and federal governments will play a major part in this transition.

An alternative which emphasized recreation opportunities could have served as a benchmark free which to compare jobs gained from the various alternatives presented in the plans.

#### 5. Monitoring

Monitoring should be an especially important part of the final BLM plans. While the draft plans include provisions for monitoring of natural resources, the plans do not include provisions for monitoring of socio-economic conditions and for modification of the plan based on changes in these conditions.

#### 6. SUMMARY

BLM districts have addressed the socio-economic impacts created by their preferred alternatives. BLM districts should strengthen their analysis and discussions in the final BLM plans to include a better analysis of district economic base and the impact on this base of the alternatives; displaced timber worker skills and reemployment opportunities; social impacts; community in modeling, job multipliers, mitigation recommendations and monitoring.

Please review Economic Development Department, Department of Forestry, and the State Economic Responses found in Appendix 2 and Oregon State's University Report for specific recommendations.

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**2. Road Management. How should RNM districts resource areas manage their road networks to preserve connectivity with resource areas.**

RNM's western Oregon road system is a valuable component of Oregon's overall transportation network. The road system serves the citizens of Oregon by providing access for timber, fish and wildlife, and watershed management. RNM roads also provide numerous recreational opportunities and are essential for forest fire protection.

Realizing the importance of road management on federal lands, the State developed a Position Paper titled, Forest Management Recommendation on RNM's Road Management Program. (See Appendix 2) The Position Paper contains the recommendations presented in this paper when developing its final RMP/IEIS.

The State paper states that RNM should develop comprehensive road management plans. That is, in addition to road maintenance and construction goals and objectives, RNM should address the various resource concerns (i.e., recreational, fish and wildlife, timber, water resources) potentially impacted by roads. These resources are interrelated and road management plans should deal with them in an integrated fashion so that there will be a total framework in which to develop road management plans.

RNM districts have inventoried their road networks and recognized the impact that these access routes have on natural resources. The draft plan expresses a need for access management in special areas, critical big game areas, old growth aspen areas, and other areas. However, there seems to be no action plan to meet these broad objectives.

We commend the Salem District on its recognition that a comprehensive road management plan needs to be developed. They have made a commitment to develop a comprehensive road management plan soon after approval of their RMP.

The following is a brief summary of our recommendations to RNM on road management:

1. The State recommends that RNM continue to aggressively pursue funding for its road management program.
2. The State recommends that a comprehensive road management plan be completed within the framework of the RMP/IEIS or shortly after approval of the plan. (See road management paper for suggested content of management plan.)
3. The State recommends that a maximum 1.0 mile/square mile road density objective (i.e., roads open to vehicular traffic be inventoried for sensitive watersheds) watersheds be recommended.

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with high road densities (i.e., greater than 4 miles/square mile); watersheds with high off-road vehicle use resulting in unacceptable environmental damage; and sensitive wildlife areas. (See May and Klamath draft plans include this recommendation.)

4. Road density objectives for other areas would likely vary based on decisions made in the comprehensive road management plans.
  5. The State recommends that RNM attempt to achieve a reasonably reduction (10%) in open road density over the next decade. This target may be difficult to achieve given the seasonal and growth patterns of lands. However, we encourage RNM to work together with adjacent landowners in an effort to accomplish this goal.
  6. The State recommends that RNM's road management program be modified as needed to address the State's Oregon's recommendations for limiting development in rural interface areas.
- Each RNM district is urged to coordinate with adjacent landowners and others in the development and implementation of a comprehensive road management program.

**3. Special Plant and Tree Species. How should RNM protect special status plant and tree species?**

**1. Special Status Plant Species**

RNM's draft plans have listed plant species found on each district. The State commends RNM on the commitment to protect on public lands under its jurisdiction. To continue protection of existing threatened, endangered, and sensitive plant species while keeping other species from being listed, the State believes that RNM should consider the recommendations noted below.

- a. RNM needs to expand the inventory of its lands to identify all existing sites for listed and candidate species, including areas not currently slated for timber sale or harvest. RNM should work with other state and federal agencies to prioritize the study and monitoring of listed and candidate species to best facilitate knowledge of habitat requirements.
- b. Prioritized management plans should be developed for special status plants that outline how particular species will be protected, especially those located in land allocations that

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allow timber harvest and domestic grazing. Emphasis should be placed on improving or restoring critical habitats rather than merely maintaining existing often degraded conditions.

- c. Long-term monitoring of special status species, especially listed plants, is essential in determining whether plant populations are recovering or declining. Recent advances in technology should be used to develop monitoring programs.
- d. Maintaining species at the level of minimum viable populations may not be sufficient to ensure survival over the long-run. It is important to recognize that a minimum viable population is essentially on the brink of catastrophe, therefore, population levels above the minimum are recommended.

RNM districts in general should be complimented on their review of listed and other special status species. These species have been listed in the draft plans. Moreover, the State applauds the recent history of cooperation RNM has shown in promoting the study of many special status species, through joint cost-sharing projects with the Oregon Department of Agriculture and other agencies. Additional comments on special plant species can be found in the Department of Agriculture's response (appendix 2).

**2. Yew Bark**

Bark from the Pacific yew tree is a source of taxol which has shown promise in treating certain forms of cancer. RNM in cooperation with the Forest Service is in the process of developing an RSM for managing Pacific yew. Lands have been inventoried to determine the amount of Pacific yew. An interim strategy is being used to guide RNM and the Forest Service on Pacific yew management until the RSM is finalized.

We encourage RNM to carefully follow the interim guidelines for Pacific yew management in order to collect the maximum amount of yew bark feasible from current forest management projects.

**3. Tribal Concerns. How should RNM districts protect traditional tribal cultural and spiritual resources?**

Lands administered by RNM's Klamath Falls Resource Area traditionally were utilized by the Klamath, Modoc and Shasta Tribes. The Shasta and Yurok Tribes also use lands administered by the Salem RNM district.

The State supports the protection of identified Native American sites sacred to, or of cultural significance to, the various tribes mentioned above. The Tribes' cultural history contributes to the State's heritage and should be protected. RNM should,

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through close coordination with the Tribes, act to inventory, evaluate, and protect sites of cultural, religious, and historic value as required by federal law. As additional sites are located, RNM should alter its plans in order to protect them, while remaining sensitive to other uses of the lands.

**4. Standards and Monitoring. Does RNM have measurable standards and a comprehensive monitoring program to determine whether plans meet short- and long-term proposed future conditions?**

The implementation of biological diversity/conservation management will mandate comprehensive monitoring programs for each district, including a dedicated funding source in order to evaluate: a) whether the scheduled activities are being implemented as per plan guidelines; b) whether the implementation of activities is effective in meeting the expected future conditions; and c) determining if activities are causing the effects identified in the RSM.

Ecosystem management and its effects on resources within the forest environment is a long-term investment. Research monitoring will be necessary in order to apply adaptive management on the ground. In a sense, ecosystem management is an experiment requiring close evaluation and monitoring of thousands of short-term projects which should lead to the final desired condition.

In order for each RMP and RSM to stand alone and meet the test of public and legal scrutiny, it must include standards followed by a monitoring plan to measure results. Standards must be measurable to be meaningful. There is little purpose in defining standards for which there are no methods for measuring the degree of compliance or attainment. The true judicial limb test for the final plans will be, have we met the standards that must support the resource management direction found within the RMPs.

RNM's draft plans fall short of meeting the State's expectations for adequate standards and comprehensive monitoring plans. Even though the plans note a need to include the three phases of monitoring, the RSM notes above, implementation seems to be the only element covered in the monitoring sections. As an example, how will the general monitoring questions for the monitoring conditions presented in the draft RMPs surface problems with plan effectiveness?

- Other questions RNM should address in their final plans include:
  1. Why aren't monitoring standards presented for each land allocation (i.e., Old growth aspen areas, General Forest, connectivity areas)?

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2. Why haven't the monitoring questions presented in district plans been tied to measurable management standards?
3. Is a threshold level of plus/minus 10 percent appropriate for changes in all resource outputs or impacts to resources?
4. Where are specific, measurable standards found in the districts/resource area monitoring plans?
5. Is there a tie between implementation and effectiveness which is necessary for meeting the expected future condition (e.g., ecosystem management)? Does BLM have a long-range monitoring framework which will direct the agency over the next 10 years in order to meet these expected future conditions?

The State believes that BLM districts/resource areas should develop more specific standards and comprehensive monitoring plans. Of special note would be the Forest Service's approach to monitoring effectiveness and validation. We feel that without comprehensive monitoring plans for each district/resource area, RMPs/Plans will not meet the public's expectations and legal challenges that the agency will face.

Annual Program Summary monitoring reports, being proposed by districts, are a positive way to allow the public an opportunity to track and assess the progress districts are making on implementing their plans.

P. Rebates. What budget will BLM districts need to carry out the preferred alternative? How should the districts react if a smaller budget allocation occurs?

BLM districts project a need to increase their budgets in the new plans in order to meet implementation and monitoring requirements. Due to the complexities of the plans and the new biological diversity approach proposed, the State agrees that more money will be needed for training personnel, research, implementation and monitoring.

If funding for intensive management practices under the current plans are any indication of expected future funding, the State is concerned that the new plans may not be implemented. BLM's biological diversity is an experiment in land management which relies on as many as yet unproven concepts.

With the uncertainty in past and present funding levels, the State recommends that BLM address the likelihood of funding for proposed actions and the impact of BLM's resources if expected funding does not materialize. This element is and by itself stands between a successful and unsuccessful outcome. Biological

diversity management will require a long-term commitment in funding to test progress and practices which encompass the expected future conditions.

BLM budgeting should not be necessarily linked to ASG levels. For example, the State expects that BLM consider establishing a fund for deeply management activities in old growth emphasis areas that is separate from the ASG derived source available for more traditional harvesting as proposed in the General Forest Management Areas. This approach would institutionally recognize the major goal of old growth emphasis areas which should be their ability in providing resources to critical wildlife/agricultural questions through the application of research and monitoring.

#### III. DRAFT PLANS ORGANIZATION

The State agencies have found BLM's draft Resource Management Plans and Draft Environmental Impact Statements very difficult to read because of the way the plans are organized. Some of the issues of concern to readers were:

- A. Difficulty in distinguishing the draft RMP from the draft EIS. For example, implementation standards were scattered throughout the documents.
- B. Lack of definable links between broad goal statements and specific actions (e.g., standards, guidelines, inventories, monitoring, evaluation).
- C. Difficulty in identifying BLM plan policies in the RMPs.
- D. Lack of substantiation to support claims of consistency with the plans and policies of other agencies affected by the RMP.
- E. Inadequate/incomplete tables of contents and indexes.
- F. Numerous errors in tables and incomplete data.
- G. Maps showing land allocations are too small to read with few reference points to decipher where allocations begin and end.

The State encourages BLM to reorganize their final plans to make them more readable to the public and land managers who will be implementing the final preferred alternative.

#### IV. FINAL COMMENTS

The State of Oregon's Final Coordinated Response represents the State's review of the six draft Resource Management Plans and Draft Environmental Impact Statements. Twelve state agencies have submitted their recommendations to the Governor's Forest Planning Task Force for consideration in the development of the coordinated response. Input from six "Open Houses" held around the state this year, public comments on the State's Proposed Coordinated Response, discussion with various interest groups and individuals, and Oregon State University's Report were all considered when developing the State of Oregon's final response.

The State will work with BLM districts and the State Office, between their draft and final, to help them better understand our recommendations presented in this document.

BRADLEY OWENS & THOMAS  
BENNETT LAND AND CONCEPTS  
INCORPORATED  
DISTRICT 50  
OFFICE OF THE DISTRICT MANAGER  
BLM - PORTLAND  
1000 NE Oregon Street, Suite 1000  
Portland, Oregon 97208



OREGON STATE SENATE  
SALEM, OREGON  
97315-1107

December 22, 1992

D. Dean Bibbs, State Director  
Bureau of Land Management  
PO Box 2945  
Portland, Oregon 97208

Dear Mr. Bibbs,

I feel compelled to register my concerns with the Preferred Alternatives outlined in the Resource Management Plan and Environmental Impact Statement which will result in a ten-year plan for the BLM lands.

As is noted by BLM staff, the Preferred Alternatives will have a negative impact on key Oregon industries such as timber and agriculture.

I do not understand how we have come to this predicament. BLM lands have been used for decades as multiple use lands that provide a base for economic activity. It now appears there is another agency that would take productive lands and set them off for recreation, etc. Where was the public input that led to the Preferred Alternatives. Can they be altered at this time? Have you considered the key industries, the County governments and the regional public in your decisions?

It would constitute a serious set back of our economy if these plans were to go from draft to final with little change. I request that this train be stopped dead and the public be called in as a partner to assure realistic uses of the public BLM lands. Please change the timetable for consideration of public comment, and work much closer with the public in reaching conclusions such as Preferred Alternatives.

Sincerely,

*Gene Timms*

Gene Timms  
Senate Republican Leader





HOUSE OF REPRESENTATIVES  
SALEM, OREGON  
97310-1407

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CLACKAMAS COUNTY  
CLERK  
1000 N. 10th Street  
Portland, OR 97228  
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CLACKAMAS  
COUNTY

Board of Commissioners

CLACKAMAS COUNTY  
CLERK  
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December 11, 1992

D. Dean Ribbles  
State Director  
Bureau of Land Management  
P.O. Box 2845  
Portland, OR 97208

RE: Draft Resource Management Plan & Environmental Impact Statement

Dear Mr. Ribbles:

I appreciate the opportunity to comment on your draft plan; however, I am skeptical of the impact public input will have on this draft.

As I look at the preferred Alternative in the various RLM area I see a continuation of the loss of the public lands we need that will deter the economic welfare of Oregon and the nation. Certainly, deficit tax dollars to maintain set asides while removing from the draft plan that the RLM is doing just that. How were the Oregon, the Preferred Alternative will eliminate thousands of off road vehicle acres and local away rivers.

I would like to see a great deal more public involvement in this planning process. I would like to see these decisions driven by public opinion in the part of the public lands we need that will deter the economic welfare of Oregon and the nation. Certainly, deficit tax dollars to maintain set asides while removing from the draft plan that the RLM is doing just that. How were the Oregon, the Preferred Alternative will eliminate thousands of off road vehicle acres and local away rivers.

Sincerely,

*John Jones*  
John Jones  
State Representative  
District 6

January 8, 1993

Mr. Dean Ribbles, Director  
Bureau of Land Management  
Oregon State Office  
P.O. Box 2845 (1300 NE 44th Ave.)  
Portland, OR 97208

Dear Mr. Ribbles:

I am writing to comment on RLM's Draft Resource Management Plan. Overall, Clackamas County believes that BLM is working toward the developing responsible plans that address the changing expectations with regard to how we manage our natural resources and for what purposes.

I do have some general concerns however. Other resource agencies are emphasizing improvements in fish and wildlife species and the habitats and riparian areas needed to support them. It appears that BLM is also attempting to incorporate such an emphasis. Consequently, it seems a paradox for any responsible planning effort to include actions that could result in a minor or significant degree of degradation in the areas of water quality or fish and wildlife habitat, or declines, as in the case of fish, wildlife, or vegetation species.

We support the objectives contained in RLM's Fish and Wildlife 2000 document to improve water quality, riparian areas, and habitat and to increase fish, wildlife, and native vegetation. This requires a minimum goal of no further disruption, degradation, or declines. We agree with the State's comments that consistent standards and measurements are necessary to monitor progress toward improvements in these areas. RLM needs to stay ahead of the slide, by not contributing to the listing of sensitive species as well as refusing to engage in or support activities which will contribute to additional degradation or declines or lead to further declines in marginal lands, forage cover, etc. It is disturbing to read plans which talk of maintaining species at minimum viable populations when we need to be planning for and discussing improvements to these populations to prevent them from becoming threatened or endangered. Future listings can only contribute to further shrinking of the timber supply.

Interagency, intergovernmental cooperative efforts are necessary to the successful achievement of many of RLM's goals. Watershed protection, recreational development and other interagency objectives with regard to improvement of fish and wildlife populations could be enhanced by BLM planning efforts taking their goals into consideration. In turn, the other agencies

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Page 2.

involved in these areas can enhance RLM's efforts as well. The State's call for BLM to enter into special partnerships is timely and can contribute to a more comprehensive approach to resource management. Partnership need to include counties as well. One particular area of concern which requires strong partnerships is the area of rural interface.

For Clackamas County, the issue of rural interface is most pressing along Highway 26 in the Hoodland Corridor. Rural interface raises the issue of BLM's management plans being developed strictly within the context of BLM lands. Comprehensive planning requires consideration of all lands in a given area regardless of ownership.

The scenic quality along the corridor has been negatively impacted by the lack of a comprehensive partnership with regard to managing lands along the highway. The patchwork ownership of these lands has led to differing degrees of harvesting and use of the same lands for the protection of visual quality. As a result, the corridor is designated as a VMS II rather than a VMS I. My concern is that the lesser designation leads itself to more intensive harvesting, which in turn, may lead to a further degradation of the scenic values which attract tourists and recreationists from around the country. It occurs to me that in management, the appropriate goal should be to improve these areas to the point where a higher classification could be assigned to them eventually.

One last issue arises with regard to RLM's plan. Due to the increasing competition among private lands and the uncertain future of timber in light of the Environmental Protection and Endangered Species Act, we agree with the State that RLM's estimates regarding timber supply should be conservative estimates. A conservative estimate of supply should increase stumpage prices, another factor with which we agree with the State. The end result may be that the increase in revenue despite a decrease in harvest yields. Any accurate estimate of socioeconomic impact needs to take the supply/demand/price relationship into consideration.

We appreciate the opportunity to offer our thoughts as you move forward with a final version of your plan. We also appreciate the difficult balance which BLM faces as it is one of the few as Clackamas County continues the transition away from being a heavily timber dependent area. We look forward to seeing the results of your planning effort.

Sincerely yours,

*Don M. Peterson*  
Don M. Peterson  
Staff Assistant

BOARD OF COMMISSIONERS

DOUG ROBERTSON DOBIE WADSWORTH JOYCE MORGAN

Commissioner • Banning, Oregon 97131 • (503) 463-4321

December 18, 1992



David A. Jones  
County Administrator  
Bureau of Land Management  
Madford District Office  
3000 Ridge Road  
Madford, OR 97504

RE: Draft Madford District Resource Management Plan

Dear Mr. Jones:

The Board of Commissioners of Douglas County would like to take this opportunity to express our appreciation for the opportunity to review and comment upon your draft Resource Management Plan for the Madford District of the Bureau of Land Management. We encourage you to continue to seek and incorporate public review and comment throughout the planning process.

We have reviewed the draft Resource Management Plan and have developed the enclosed comments and questions. In addition we have participated with the Association of O & C Counties in a coordinated review by all of the O & C Counties. We adopt the coordinated comments of the Association of O & C Counties as part of our comments as well.

The Board of County Commissioners is committed to working with the Bureau of Land Management in the development of a final Resource Management Plan. We will continue to submit comments and participate as you develop the final plan.

Respectfully submitted  
THE BOARD OF COUNTY COMMISSIONERS  
DOUGLAS COUNTY, OREGON

*Don M. Peterson*  
DOUGLAS COUNTY CLERK

*Don M. Peterson*  
DOUGLAS COUNTY CLERK

*Don M. Peterson*  
DOUGLAS COUNTY CLERK

*Don M. Peterson*  
DOUGLAS COUNTY CLERK

COMMENTS OF THE  
BOARD OF COMMISSIONERS  
OF  
DOUGLAS COUNTY  
AS TO THE  
MERCED DISTRICT  
BUREAU OF LAND MANAGEMENT'S  
DRAFT RESOURCE MANAGEMENT PLAN

On behalf of the citizens of Douglas County, the Board of Commissioners of Douglas County ("Board") presents the following comments on the draft Resource Management Plan for the Merced District of the Bureau of Land Management (BLM). Douglas County appreciates this opportunity to offer comments and to continue its participation in the BLM's planning process.

#### INTRODUCTION

The BLM manages several different categories of land within Douglas County, each has its own management direction and impact upon the county. The economic base of Douglas County is dependent upon these forest lands. In addition the local governments are heavily dependent upon the receipts from these lands to operate local governments.

With approximately 51% of the land base of Douglas County within federal ownership and over 64% of the County's operating income derived from federal lands, the County, out of necessity, is very concerned over the management decisions made relative to the BLM managed lands.

The dependence upon timber receipts is clearly illustrated by comparing the funding for county government derived from federal

1. Revested Oregon & California Railroad lands, Revested Once May Wagon Road lands, and the Public Domain lands.

2. In the period of 1964-68 the O & C lands alone contributed an average of \$1,772,708 annually or 18.1% of the County's total revenue. Over the last few years to where 1987-91 average is \$21,468,300 annually. The Once May Wagon Road lands have also contributed substantially to local schools and government.

#### 1. COMMENTS OF THE DOUGLAS COUNTY BOARD OF COMMISSIONERS

Assessment Task Force on Economic Development, wherein the authors noted that "(t)he timber industry remains the chief source of economic strength and livelihood in Douglas County. Its continued health is critical to our economic future" (1990 p-3)

While county government is heavily dependent upon the timber receipts, the general economy of the county is also timber dependent. Over 70% of the economic activity within the county starts with the harvesting of timber. Considering all industry within the county, over 18% of the jobs and 80% of the payroll are derived from the direct, indirect, and induced effects of activities of the timber and wood products sector.

Not only are the O & C lands important for the economic health of the community, they also play critical roles with respect to the social health and quality of life in Douglas County. As Dr. Robert Lee stated in his report on the O & C lands, a 15 percent reduction in O & C revenue would force the affected counties to reduce essential services thus causing a substantial deterioration in the quality of life. This curtailment of county services would coincide with a period of rapid growth in the demand for services caused by increased unemployment and economic dislocation such as human services, public health care, mental health counseling and housing assistance.

Lee Hocken, Administrator of the Douglas County Department of Health and Social Services testified recently before the Endangered Species Committee that the needs for his agency's services increase in times of unemployment and that reductions in O & C revenues to the county would result in reduction or elimination of those services.

Recently Dr. John Neuter noted that "Douglas County has a timber dependent economy. It began that way, remains so today, and likely will continue to be in the future." He was correct, timber has been the mainstay and foundation of Douglas County's economy.

Similar observations were reported in the Bureau of Land Management's "Strategies for the 1990's: Timber, Tourism, and Community Economic Stability in the O & C." This study noted "(t)he data point to a heavily timber-dependent local economy that has suffered substantially in the recession and is slow to rebuild. The dependency of this timber-based on the BLM is high, and shows signs of continuing to be so. The Roseburg timberland is very vulnerable to any changes in the timber market." (emphasis added)

This dependence upon timber has not been an accident. It was the result of comments made earlier in this century by Congress relative to both the Forest Service managed lands and the lands managed by the BLM.

It is within this environment and history that Douglas

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timber receipts as opposed to the funding derived from local taxes. During 1991 the county received \$10,182,641 in federal timber receipts, of which \$2,656,788 was derived from the O & C lands alone. In contrast, the local property taxes provided \$2,959,168 to run county government during this same time period.

While historically the county had the option of raising taxes to offset a reduced timber harvest, that option is no longer available. With the adoption of the county's cap on local property tax (Measure 5), it is legally impossible for Douglas County to increase its tax base. Therefore any reduction in timber receipts to the County will be particularly hard felt.

In addition since 30% of the property tax roll valuation is directly linked to the forest products industry (i.e. sawmills), if these operations are shut down or curtailed the impacts upon the county government will be increased far beyond the loss in timber receipts.

Recently several analysis have been conducted as to the effect of declining timber harvests on Douglas County, including future economic development as well as social impacts. These reports indicate major economic and social problems for Douglas County with little opportunity to mitigate.

In the recent "Assessment of Economic Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis for the south county, BCO Northwest found that "Southern Butte County does not possess, and does not have ready access to, some key ingredients necessary for future economic growth." (p.7)

The analysis also noted that "(t)he decline in timber industry employment, payroll, and the payments will continue to tear at the economic, social and political fabric of the community" and that "(t)he best decline in timber industry employment and payroll and uncertainty about future declines, may hamper the community's willingness to invest in the infrastructure to generate additional social problems, such as domestic violence, and may increase the need for social services" (p. 11)

The results of the BCO Northwest report for Southern Butte County was mirrored in the analysis of Barney & Norton entitled "Douglas County Task Force, Final Report, Douglas County Strategic

3. Measure 5 limited non-school entities to a tax rate of \$10/1000 of valuation. While Douglas County as a taxing entity is not subject to Measure 5, the tax rate for non-school entities is already above the constitutional limit. There is no legal means to increase taxes to offset a reduction in BLM receipts.

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County makes the following comments:

#### II.

##### Historical Framework for Management of the O & C Lands.

The reversion Oregon & California Railroad lands were originally part of a grant to aid in the construction of railroads from California to Portland and from Portland to Astoria and Minnerville. In 1916 title to these lands was subsequently reversioned by Congress in an attempt to resolve a Supreme Court case concerning the Oregon & California Railroad's violation of the covenants contained in the granting terms.<sup>1</sup>

Prior to reversion these lands were the subject of numerous lawsuits both in federal as well as state courts. The controversy over these lands was finally resolved by Congress via the Chandler-Parris Act of 1916. Under this act the lands were reversioned in the United States, however, in recognition of the claims by the State of Oregon, the act provided that the United States apportioned a percentage of the proceeds from these lands to the counties and the State of Oregon.

This apportionment has at various times been eluded out as a raid by the State of Oregon upon the public treasury. However this argument ignores the history of these lands. To understand their true place in Oregon's history, one must remember that the granting acts originally designated these lands for the purpose of settlement and upbuilding the State of Oregon. The O & C lands are in essence a trust fund to compensate Oregon for the railroad's failure to properly dispose of the lands. The federal government's subsequent retention of the land, thereby thwarting the purposes of the original grants.

While the Oregon & California railroad grants were obviously designed to provide the financial means for building the railroad, they had the dual purpose to aid in settling the land. The O & C

<sup>1</sup> Act of April 10, 1869 (16 STAT 231) and Act of May 4, 1870 (16 STAT 241).

<sup>2</sup> Act of June 9, 1916 (39 STAT 2181).

<sup>3</sup> Sen. Rep. No. 494 64th Congress, 1st Session, May 18, 1916, p.41.

<sup>4</sup> While under the control of the O & C Railroad the annual fire assessment and local taxes were not paid. The federal government recognized that these taxes were a serious encumbrance on the lands, an encumbrance that would have to be paid before the lands could be sold to actual settlers.

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Railroad grant expressly required the railroad to sell the grant lands to actual settlers. "To avoid not retain them or convey them to financial institutions as had earlier railroads."

When the O & C Railroad failed to sell the lands to bona fide settlers the Supreme Court ruled that the failure to sell was a breach of the settlers' covenant. The Court ruled that the railroad could not withhold the lands until Congress had the opportunity to develop legislation that would accomplish the purposes of the act. "Sale to bona fide settlers." The Supreme Court expressly noted that if Congress did not act it would remove the injunction and the District Court could proceed with disposition of the land to actual settlers. When viewed in the debates over the O & C Act is the fact that the Supreme Court did not rule that the federal government could retain the lands. In fact its ruling was designed to get the lands into the hands of bona fide settlers in fulfillment of the original Oregon and California Railroad grant."

"... shall be sold by the company to actual settlers . . . " 16 STAT 84, sec. 4.

In the first grants to railroads there was no restriction upon the disposition of the lands. They were given in aid to enterprises of great magnitude and uncertain success, and which might not have succeeded under a restrictive or qualified aid. However, a change of times and conditions brought a change in policy, and while there was a definite and distinct purpose to aid the building of other railroads, there was also the purpose to restrict the sale of the granted lands to actual settlers. These purposes should be kept in mind and in their proper relation to the subordinate.

Oregon & California Railroad et al. v. United States 35 U. S. Ct. 908, 317 F.2d 1013.

Given the Government's interest in the exact observance of these covenants the Court enjoined the railroad from further sales in violation of the covenants and enjoined them . . . from any disposition of them whatever, and from cutting or authorizing the cutting or removal of any of the timber thereon until Congress shall have a reasonable opportunity to provide by legislation for their disposition in accordance with such policy as it may deem fitting under the circumstances. Held at the same time as to the defendants all the value the granting acts conferred upon the railroads. p. 125-126

The Court did not rule that Congress had the authority to reserve these lands. It merely stated Congress could develop law legislation for the disposal of the lands and timber. The rule was 5 COMMENTS OF THE DOUGLAS COUNTY BOARD OF COMMISSIONERS

The court did not rule that Congress had the authority to reserve the lands. It merely stated Congress could develop law legislation for the disposal of the lands and timber. The rule was 5 COMMENTS OF THE DOUGLAS COUNTY BOARD OF COMMISSIONERS

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While the original act called for the outright liquidation of the government's interest in the land and the timber thereon no provision was made for the administration of the land on a conservation basis. The act provided that the timber should be sold as rapidly as reasonable prices can be secured on a normal basis and the out over lands disposed of for agricultural purposes. Clearcutting was the technique of choice with no consideration for the effect on community industries. The Supreme Court concurred with this original procedure.

This policy was later found to be wasteful and destructive of the social interests of the community. The Supreme Court coupled with the fact that the counties were not being fully reimbursed for the tax monies owing, resulted in the O & C Act being amended to incorporate reservation of the lands and adoption of a sustained yield program of timber management. However with this change the counties could not reap the full benefit originally intended by the granting act. To rectify this violation of the granting act, the reciprocity formula was incorporated into the sustained yield program. This formula was designed to compensate the counties not only for past taxes but the loss of these lands from settlements."

While one often encounters arguments that the O & C Act is a special program for the State of Oregon, the history shows that it is in fact the fulfillment of the terms of the O & C Railroad grant. This unique history distinguishes the O & C lands from both the public domain lands and the forest preserves.

Unlike the public domain lands and the forest preserves, the O & C lands are not free of encumbrances. They are in fact, analogous to a trust - a trust between the federal government and the counties within which the beneficiaries of the trust are the beneficiaries of the trust are the O & C Counties with the federal government serving as the trustee."

It must be remembered that these lands were dedicated to the settlement and upbuilding of the State of Oregon. The railroad

It is important to note that this finding was made by Congress and was not an issue presented to the Supreme Court for reconsideration. Retention could only be attained by compensating the counties in some manner. Clearly, in the absence of compensation litigation would have again clouded these lands.

"House Rept. 1119, 75th Cong. 1st Session, June 28, 1937, p. 1-2.

A trust relationship not unlike the trust relationship between the federal government and the Indian tribes or the States of Oregon and the Common School Fund.

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During the ensuing debates Congress clearly recognized that far more than a false railroad was at issue. It was to abide by the settlers' clause the railroad defeated one of the purposes of Congress in making the grant. Namely, to give the entire a path westward and for prosperous communities to take place of a wilderness.

The railroad was the agent of Congress to effect the settlement of the grant lands. By refusing to sell the grant lands to actual settlers the railroad was untrue to its trust, thereby regarding the settlement and development of the State of Oregon."

In as much as the original purpose of the granting act was the welfare of the State of Oregon, Congress desired that this purpose be resumed. This purpose was how to prevent accomplished by devoting the grant lands or their proceeds to the original purpose of hastening the development of the state."

Congress determined that " . . . Oregon should reap the full benefit originally intended to be conferred on the State by the granting act, and the devotion of the lands, or the proceeds therefrom to the upbuilding of the state."

However it was obvious to everyone that due to the standing timber these lands were worth far more than the \$2.50 per acre mandated in the granting act. The dilemma was how to prevent speculators from acquiring the lands, thereby preventing the original goal of the grant - settlement by bona fide settlers.

Of importance to this deliberation was the fact that the Supreme Court had not ruled that Congress could retain the lands. It merely enjoined further sales until Congress developed legislation to dispose of the lands to the actual settlers contemplated in the original act. To resolve this issue Congress directed that the timber be removed and the cutover land be sold to the bona fide settlers. The proceeds were to repay the railroad, counties, and the federal government.

to enforce a continuing covenant, not a condition subsequent. Oregon California Railroad v. U.S. 35 S. Ct. Rept. 958, 320, 932 (1914)

13. Sen. Rept. 434, p. 41

13. id. 41-42

13. id. 42

13. id. 42

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company was chosen as the agent of Congress to affect the settlement of the grant lands. It was untrue to its trust. The lands have always been devoted to the original purpose of the railroad grant.

To define the true relationship between the Federal government (land and O & C) counties one must refer to the laws of trust, with particular reference to similar trust relationships (i.e. common school fund, Indian tribes and trust territories). Without going into detail, one can generally conclude that as trustees the federal government must take all steps necessary to the effect of the trust. If the federal government were to dedicate these lands to purposes not contemplated in the act then it would have acted in violation of its trust duties and could be held financially accountable.

The purposes of the various O & C Acts are very clearly stated. When called upon to address the purposes of these lands the Ninth Circuit has been clear. If the O & C acts are clear that the primary use of the lands is for timber production. The court noted the act specified that the lands shall be managed for permanent forest production, and the timber thereon shall be sold, cut, and removed in conformity with the principle of sustained yield for the purpose of providing a permanent source of timber supply, protecting watersheds, regulating stream flow, and contributing to the economic stability of local communities and industries, and providing recreational facilities.

The Court went on to note that nowhere does the legislative history suggest that wildlife habitat conservation or conservation of old growth forest is a goal on a par with timber production or indeed that it is a goal of the O & C Act at all.

With out expressly stating it, the Court was reaffirming that the original purposes of the granting act to the railroad must be attained. As long as the O & C act is followed these purposes are met.

It is within this historical framework that the BMP must be analyzed. While the public domain lands may be managed for

"Sen. Rept. 434, 64th Cong. 1st Session (May 18, 1914) p. 42-43

"Madawatha v. Bluff, (Ninth Circuit, No. 89-35888, Sept. 10, 1935)

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multiple use concepts, the O & C lands can only be managed under the concept of multiple use. If such management does not reduce the receipts to the counties.<sup>11</sup>

The standard for management is set by the ability of the BLM to manage these lands under sustained yield principles while abiding by the other legal mandates that apply equally to federal as well as private lands.

#### III. Coordination with Local Planning

The BLM planning regulations provide clear directives that the resource management plans are to be consistent with officially approved or adopted resource related plans and the policies and programs contained therein. (43 USC 1712) The Oregon Forest Practice Act also states that the BLM must coordinate with local resource related plans and policies are found in the local comprehensive plans.

Under the planning provisions contained within the Federal Land Policy and Management Act, the Secretary is:

"to the extent consistent with the laws governing the administration of the public lands (i.e. O & C Act), coordinate the land use inventory, planning, and management activities of or for such lands with the land use planning and management programs of other Federal departments and agencies and of the State and local governments within which the lands are located. . . by, among other things, considering the policies of approved State and tribal land resource management programs (i.e. comprehensive plans). . . Land use plans of the Secretary under this section shall be consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act."<sup>12</sup>

Since the expression of public policy and balancing of conflicting uses is the role of the comprehensive land use planning process, the BLM RMP must be consistent with the local comprehensive plans. Either the BLM must conduct a consistency review or make a formal request to Douglas County for such review.<sup>13</sup>

"The receipts formula was designed to not only compensate the counties for the lost tax receipts but also as fulfillment of the original Railroad Grant."

"We note that the Douglas County Planning Department has been contacted frequently by the BLM in developing this draft. However we are unable to find in the RMP any reference to the

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#### III.

##### Oregon Forest Practices Act

The Oregon Forest Practices Act ("OFPA") is included in the Douglas County Comprehensive Land Use Plan, and is the benchmark which the BLM should review its own proposals for consistency.

The OFPA is the model for the rest of the nation and was crafted in an open public forum with widespread public involvement and legislative review. Given this intensive public and legislative scrutiny, any departure from the OFPA should be identified as an inconsistency.

If the BLM chooses not to act consistent with the OFPA, it is required, by its own regulations, to provide not only the rationale for acting inconsistent with the OFPA but also a report of alternatives. The BLM should also be required to provide a statement of how the BLM will prepare a cost-benefit analysis relative to any departure from the Oregon Forest Practices Act.<sup>14</sup>

#### IV.

##### Role of Public on O & C Lands

In developing the final RMP it is important to recognize that the lands under BLM management do not have a uniform history and as a result have differing management requirements. As we have noted earlier the O & C lands are to be managed strictly according to the purposes in the various O & C Acts. The RMP emphasizes that it is designed to fulfill the requirements of FPLMA, however this statement oversimplifies the issue. While FPLMA is seen by some as the "organic act" for the BLM, it does not universally apply to all lands managed by the BLM.

The BLM's authority under FPLMA is limited by other provisions of the law and by the category of lands under

inconsistencies that are present. For example we find no discussion of the Willamette Hill dam project or the impacts of varying from the Oregon Forest Practices Act.

"There are numerous examples of where the BLM has in its discretion elected to develop management practices in excess of the OFPA. Among these is the selection of a riparian buffer zone not only in excess of the OFPA but also in excess of the actual riparian area."

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consideration. While the Federal Land Policy and Management Act ("FPLMA") applies to all of the BLM managed lands, the degree to which it applies depends upon the lands in question.<sup>15</sup>

One must be very cautious in applying the provisions of FPLMA to the O & C lands since Congress has clearly stated that the statutory mandates under the O & C Act override any conflicting provision within FPLMA. In adopting FPLMA, Congress noted that:

"Notwithstanding any provision of this Act, in the event of conflict with or inconsistency between this Act and the Acts of August 28, 1937 (50 STAT. 43) and July 18, 1938, and May 24, 1939 (53 STAT. 753), insofar as they relate to management of timber resources, and disposition of revenue from lands and resources, the latter Acts shall prevail."<sup>16</sup>

The courts have uniformly stated that the primary use of the O & C Act lands is for timber production in conformity with the provision of sustained yield. That primary use overrides any conflicting or inconsistent provision of FPLMA.

As stated in the O & C Act these lands:

"shall be managed, except as provided in section 1816 of this title, (since repealed), for permanent forest production, and the timber thereon shall be managed in conformity with the principal goal of sustained yield for the purposes of providing a permanent source of timber supply, protecting watersheds, regulating stream flow, and preserving and contributing to the economic stability of local communities and industries, and providing recreational facilities."<sup>17</sup> (emphasis added)

Several court cases have clarified that the primary purpose of the Act is permanent forest production. Timber is to be removed under the doctrine of sustained yield to provide timber supply, protect watersheds, regulate stream flow, contribute to economic stability, and provide recreational facilities.

These same courts have found that the O & C Act does not even suggest that wildlife habitat conservation or conservation of

<sup>11</sup> The Federal Land Policy and Management Act specifies that "Notwithstanding any provision within this Act and the Acts of August 28, 1937 (50 STAT. 43) and July 18, 1938, and May 24, 1939 (53 STAT. 753), insofar as they relate to management of timber resources, and disposition of revenue from lands and resources, the latter Acts shall prevail. See 701(b).

<sup>12</sup> 50 STAT 2786, Sec. 701(b)

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<sup>14</sup> The original O & C Railroad grant had a dual purpose, one was to provide the funding necessary to build the railroad, and the second was to aid in developing the land by placing the lands in the hands of bona fide settlers. The second purpose, the second purpose the Supreme Court instructed the federal government: "to come up with a plan that would accomplish the development of Oregon. The government in turn developed the strategy of reawakening the lands with the eventual sale of the land to settlers and revenues returned to the counties."

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## VI.

## Intensive Management

In the preferred alternative the RMP proposes to establish four categories of forest management (old-growth emphasis, general forest management, visual, connectivity management) each with a varying degree of management intensity. In reviewing the activities within each category it appears that while the general forest management areas are described as intensive management in accord with the O & C Act, in fact these lands are considerably constrained.

If the lands are to be managed for intensive timber production then management should be free of restraints to the fullest extent allowed by law (i.e. OFPA and O & C Act).

## VII.

## Land Acquisition

The preferred alternative includes a provision wherein the RMP seeks to acquire additional lands for recreational or fisheries values. The Board expressly reserves the right to comment directly on any proposed land acquisitions or exchanges.

With the projected decrease in receipts, the county can ill afford any additional reductions in its land base. Therefore as a general policy the Board opposes any additional land acquisitions. Furthermore the Board opposes any trade of O & C lands, unless the acquired lands assume the O & C status.

We note that the State of Oregon has likewise adopted a policy against further erosion of the tax base. The Governor recently wrote or received opposing an Indian gambling proposal on the basis, among others, that the project included the acquisition of land and the resulting removal of the land from the tax base.

The acquisition of more land by the federal government within the county has a dramatic impact upon the county tax base. In addition due to the high degree of federal forest receipts and federal land base within the county, the county has limited

"1. While the O & C Act allows other uses such as recreation, it does not require these uses on each acre of land. By allocating other lands with these alternatives use emphasized, then the OMA should be totally free of these additional restrictions.

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management." Likewise the fact that the TRIM and GRADAM models are being pushed far beyond what they were intended to do creates a need for very close monitoring and analysis as we implement the RMP.

We are very concerned that the RMP is not providing sufficient monitoring or monitoring with the requisite sensitivity to analyze the impacts of its various programs.

## X.

## Stumpage Prices

The reported timber stumpage prices utilized to calculate the sensitivity analysis were derived from the average timber sale price for the 1981-88 time period with an estimated real wood price increase estimated at 1.2% annually. As we indicated earlier the 1981-88 time period does not reflect the most current sale prices. We suggest that either the 1981-92 or 1976-1992 period be used for this analysis. Furthermore the 1.2% price increase has not been supported by recent real market values.

Given the fact that the RMP anticipates receipts will not drop significantly due to increased prices, to be consistent the anticipated price increase levels that were utilized in assuming the rising prices would counterbalance recent harvests (i.e. 4-94) should be used in the sensitivity analysis.

## XI.

## Riparian Buffers

During the ANM process we expressed our concerns over the fact that the riparian buffers had been improperly hard wired to incorporate a one hundred foot buffer on each side of the third order and greater streams. At that time we recommended that the RMP follow the Oregon Forest Practices Act provisions relating to riparian areas. In reviewing the RMP we find that our original concerns have not been addressed.

In addition during our review of the RMP we were unable to

"2. Under the Endangered Species Act, agencies have been placed into a position of single species management, a management philosophy that has the potential to place other species at risk.

"3. The 1983-88 time period was some of the lowest years and therefore selecting a four year period from these years does not truly reflect the historical average. The 1976-91 average is \$22,641,000 in receipts for Douglas County alone.

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opportunity under the RMP program. Unless a change is made in the RMP program, the county incurs an economic hardship whenever the federal government acquires more land within the county.

## VII.

## Endangered Species Act Consistency

In reviewing the final table for completion of the RMP plans we note that the U.S. Fish and Wildlife consultations with respect to the northern spotted owl, will not be completed until after the close of the public comment period. Since the consultation process may result in a significantly different preferred alternative than what has been developed, the Board recommends that the public comment period be extended until after the consultation results are available to the public.

While the public may have little input in the Fish and Wildlife consultation, the public has a role to play in determining the balance in other outputs and in creating methods to enhance the recovery of the northern spotted owl. Since this balancing process can not be done prior to release of the consultation results, the public comment period should be left open to allow for additional review and comment.

## VIII.

## Reference Points

Typically forest management can be described as a large ecosystem experiment. However, it is an experiment that has not been accompanied by scientific baseline analysis, replications or monitoring over time. Likewise, the proposed RMP that recognizes the scientific subjectivity contained within the various alternatives.

The need for sensitivity analysis throughout the planning horizon must be recognized and the appropriate funding assigned to cover the costs of analysis. The RMP must adopt a program that establishes scientifically valid reference points and monitoring programs. This need for scientific reference points is underscored by the RMP's emphasis on the new theoretical concepts of ecosystem management and emphasis on single species

"4. We note that it is frequently asserted that the reduction in O & C Receipts can be made up by RMP payments, however in fact the O & C lands are not considered federal lands for RMP payment purposes.

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determining how the TPOC and the new riparian distances as set forth in the draft RMP interrelate. We recommend that the RMP either follow the Oregon Forest Practices Act or in the alternative map the specific riparian areas.

The riparian areas are of such importance that we encourage the RMP to adopt a site specific management program. With a site specific management plan, these areas could be managed with sufficient sensitivity that timber management and other uses would be accommodated.

The proposed riparian management program overlooks the interrelationship between coarse woody debris and channel morphology. It also adopts an arbitrary standard for determining the existing condition of riparian areas. In reviewing the proposed standard based upon "natural riparian vegetation" we find that it ignores the impacts of soil type, stream channel morphology, and the value of the vegetation other than large trees. We believe the proposed approach does not provide a benchmark that is in any way an indicator of riparian health.

## XII.

## Alternatives

The preferred alternative proposes a drastic departure from the current harvest plan. While we share with the RMP the also experiencing drastic declines. With the current harvest pressure on private lands, a complete inventory and growth projects utilized to the timber supply analysis.

We recommend that the RMP consider adopting a ramp down process that will allow the dramatic decrease to be phased in.

## XIII.

## Endangered Species

It appears that the major driving force in this RMP is the Endangered Species Act. While we share with the RMP the difficulties created by the single species management direction of the Endangered Species Act, we are unable to determine from the RMP the true impacts of this management direction. The true costs of

"5. P. 2-40

"6. We are very concerned over the use of 'ecosystem management' as a means to place lands into a no-management classification. If used properly the 'ecosystem management' technique should allow these riparian areas to provide timber to support the local communities.

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managing for the various species listed under the Endangered Species Act must be clearly set forth. In addition we must have sufficient baseline data and monitoring programs in place to determine the success of this program.

We recommend that the BLM clearly set forth the target populations for each of the listed species, current population status, management goals, and a detailed monitoring program.

#### IXF.

##### Technical Abilities

In reviewing the computer modeling capabilities of the BLM relative to uneven age management, we find that the current system is unable to track uneven age stands, with this technological weakness it will be difficult for the BLM to properly track and monitor the uneven age stands that will be the focus of the ecosystem management strategy.

#### CONCLUSION

The Board of County Commissioners appreciates this opportunity to provide these initial comments. The Board will continue to provide comments and aid the BLM in crafting the final BLM.

We close our discussion by referencing the draft BLM wherein it is noted that under the preferred alternative that employment losses will increase and in turn increase the local demand for social services. This increase in demand for county services occur at a time when the county's ability to respond will be reduced.

While current training and support programs are estimated to provide assistance to 40% of the displaced workers, the remaining 60% will be left without assistance. This is unacceptable, clearly if society as a whole believes it is in the nation's best interest to displace these workers, then society has an obligation to assist these workers make the transition.

If the cost to retrain and assist 60% of the displaced workers will total \$24,334,000 then the cost to retrain and assist 100% of those displaced will equate to \$37,000,000. When these sums are added to the local county receipts, lowered tax base and impacts on schools, the total impact is astounding.

With the economy and social fabric of Oregon "on-the-line" it is our obligation as County Commissioners and in turn the obligation of the State to take all steps necessary to be

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regressive players in the development of the BLM Resource Management Plans. We believe the considerations outlined above will aid the BLM in the development of its final BLM.

It is our recommendation that the selected Alternative incorporate these comments and fully comply with the requirements of the original Oregon-California railroad grant, and the existing O & C Act. At this time the alternative that most closely complies with these acts is Alternative B. We concur with the position set forth by the Association of O & C Counties and urge you to give Alternative B careful consideration when you select the proposed action.

In the event that compliance with the Endangered Species Act precludes the adoption of Alternative B, we can then select the preferred alternative as long as the issues and changes set forth above as well as those set forth by the Association of O & C Counties are incorporated and resolved. We believe that ecosystem management which provides for the recovery of the riparian owl, bald eagle, as well as the various salmonid species, can be attained while maintaining consistency with the O & C Act if these changes are incorporated.

Finally, in the event an alternative is selected that reduces the average timber harvest from the past ten year period or changes the average grade, the county requests that the change be phased in.

18 COMMENTS OF THE DOUGLAS COUNTY BOARD OF COMMISSIONERS



## JACKSON COUNTY OREGON

10 S. OAKDALE • MEDFORD OREGON 97501

BOARD OF  
COUNTY COMMISSIONERS  
Rita Holt 770-7238  
Mike Perry 770-7238  
Earl Hughes 770-7238

December 21, 1992

Mr. David Jones  
District Manager  
Bureau of Land Management  
3040 Biddle Road  
Medford, OR 97504

Dear Dave:

The Jackson County Board of Commissioners is appreciative of the opportunity to respond to the Draft Resource Management Plan and Environmental Impact Statement for the Medford District of the Bureau of Land Management.

The first concern is concerning the plan in management objectives from a dominant use objective, i.e. the production of timber on a sustained yield basis, to an ecosystem management objective. There are a range of concerns that need to be addressed in order to justify the shift.

The concerns with the plan as outlined in the preferred alternative are as follows. There is no reference in the Draft Resource Management Plan and the O & C Act and the mandate to manage for timber production and community stability. The BLM needs to include the 1897 Act and the subsequent court rulings which refer to managing for a local benefit. The BLM needs to clearly outline the relationship between the mandated objectives of the O & C Act and the preferred alternative and explain how the act will best meet the mandated objectives.

The second concern is that the plan fails the requirements of FLPMA, regarding land use planning. Title II - Land Use Planning, Land Acquisition and Disposition Section 200(k)(v) outlines the language requiring management of public lands to coordinate federal land use with state and local land use planning and management processes.

"In implementing this directive, the Secretary shall, to the extent he finds practical, keep separate of State, local and tribal land use planning, to the extent that consideration is given to those State, local and tribal plans that are germane to the development of land use plans for public lands, assist in resolving, to the extent practical, inconsistencies between Federal and non-Federal Government plans..."

Mr. David Jones

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December 21, 1992

Jackson County's Goal Four, the forest goal in the Comprehensive Plan, refers to the importance of the planning effort because of the forest resource's major role in supporting public and private sector economy.

"Managing, growing and harvesting of timber will continue to be a dominant land use on the majority of areas recognized by the Comprehensive Plan as Forest or Woodland Resources." Forest lands are important not only for wood production, but also important to agriculture, as high elevation grazing lands. In addition, the Comprehensive Plan recognizes the value of managing these lands for other values, though timber is considered the dominant use. The other values besides grazing include watershed, wildlife habitat, mineral/aggregates and recreation. To be consistent with the local land use laws, the commercial forests shall consider timber production as a dominant use.

The third concern is that much of the plan implementation is based on data and theory, not scientific research. We would like to see references to the research that supports the shift in management objectives.

The fourth concern is for maintaining community stability. The requirement of the O & C Act is that the BLM manage for community stability. The ASD and management objectives will not support stability in our rural resource-dependent communities. The communities experience widespread loss of a job base and county services, both directly related to public timber supply. At the same time Balfour Beatty #5 will kick in and severely limit schools and human resources state services important to these rural communities. Balfour Beatty #5 will also preclude counties from going out for a new base to replace O & C funding. Please refer to the analysis of social impacts commissioned by the O & C Counties Association and written by Robert Lee, The University of Washington (Lee, L.G., P. Summers, H. Bins, C. Nelson, and J. Ziesler, Social Impact of Alternative Timber Harvest Reductions in the O & C Counties, University of Washington, 1991).

Dr. Lee discusses the impact of employment on town workers, tells why retraining would be difficult, and outlines a series of potential social problems generated from the loss of the logging related occupations.

The combination of social problems and loss of occupation for people in the logging industry creates with it a loss of identity, many times associated with the independent nature of people working in the woods. Dr. Robert G. Lee and Matthew S. Carroll outline the unique complexity of the problems surrounding loggers in a declining job situation. They discuss the "occupational community" in which countless life events beyond the workplace. The occupation defines the sense of identity or sense of self. The study reinforces the notion that to retrain and change occupations will be difficult. It will be particularly complicated if there is little or no justification for the job loss and loss of community stability. With planning, the core of jobs, loggers and related

Mr. David Jones

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December 21, 1992

occupational groups can continue in the community working much like they have for generations. This would maintain community stability. Other countries like Finland have maintained a wood products industry successfully for 90 years, and have not run out of trees or forests.

In addition the report indicates the dependency of Jackson County on the O&C funds. Health and Human Services, Mental Health and Environmental Health depend on O&C funds, law enforcement is 22% dependent and all other departments are dependent to a lesser degree. If we assume that the ASQ is half, as is the preferred alternative, we must assume that the response to counties will be reduced. The DNR assumes the higher prices of sales will make up the difference so the counties will see little or no change. We don't believe that will hold true. A more active market would be that the reduction of supply will raise substantial mill closure - both as a result of high unprofitable timber, and the cost of running mills on marginal supply in raising mill operations costs, i.e. one shift increases costs of production while meeting demand increases. Mills operate at a loss.

The mill closure means there will be less wood demand thus lower bid prices on timber. One cannot assume the higher prices will continue.

The result is that counties will receive less revenues. Social services and police and safety services will be reduced as a result of less revenues. We can predict a number of our rural communities will be rendered unstable as a result of the impact of the county's declining services in addition to the impact of mill closures.

There is no factor in society that can create a more stable community than one dependent on a renewable, natural resource managed on a sustained yield basis. The BLM shows that in 1977 there were 50 billion board feet of merchantable timber on the O&C lands and today, the inventory stands at 49.7 billion board feet. Over 40 billion board feet of timber have been harvested. This is certainly sustained yield or close to it. A renewable resource supplies a constant source of employment and services so necessary for stability in rural communities.

We think the BLM should define community stability and continue to manage with the objective of maintaining that stability in our rural resource dependent communities. If information is not available on specific objectives, it should be researched and made available to scientifically define what is the management objective. This would include providing resources for the O&C counties to continue to provide necessary services.

Over 90% of Jackson County land is owned and managed by the Federal government. There is some responsibility for the Federal government to pay in lieu of the property taxes that aren't collected on the 52% of land. The residents of Jackson

Mr. David Jones

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December 21, 1992

County did not create the problem, thus they should not have to pay when the Federal government shifts management objectives.

In conclusion, Jackson County will support the preferred alternative, but with adjustments to the ASQ. This could entitle and bring Resource Management Areas and less burning and more timber extraction. We support managing for sustained yield of the goal of deferring, but also managing for rural production and community stability. Healthy forests should be a prime objective.

The issues within this draft Resource Management Plan are issues critical to our county government, to the future health of our forests and to the rural resources dependent communities in southwestern Oregon. We advocate planning and managing for the long term with the goal of leaving communities and the forests to our children that are as good as or better than we found them.

While we find this issue so important to us directly, we know we serve as an example for how we can model wise resource use to other communities in the United States and perhaps in the world. We are proud of the wood products we produce here in the Medford BLM and we believe this district forest is managed as well as any forest in the Northwest. We urge the District to not lose sight of the dependent communities that helped the District become so effective.

Sincerely,

JACKSON COUNTY BOARD OF COMMISSIONERS



Rick Holt, Commissioner



Rick Holt, Commissioner



Rick Holt, Commissioner

cc: Ray Doerner, O&C Counties Assn.  
Rus McKinley, BLM Cascade  
Sheris Modet, SOTIA

## JOSEPHINE COUNTY OREGON

COURTHOUSE GARYS PARK OFFICE YILLIAN LYLE  
202-4-0181

October 16, 1992

David Jones, District Manager  
Medford District Office  
3000 Little Road  
Medford, OR 97504

Dear Mr. Jones:

We, the Board of Commissioners for Josephine County, wish to express our appreciation for this opportunity to publicly respond to the draft Medford District Resource Management Plan and Environmental Impact Statement.

As we become more cognizant in understanding the implications of adopting and implementing the preferred alternative (PA) as offered, we recognize there is a need for a more philosophically and departure from our historical partnership, both philosophically and statistically. Without some type of modification to the management direction that will restore a balance to resource allocations in the plan, the next ten years of human existence in our region shall be attended by the severest of consequences in terms of city and town infrastructure failures, social degradation, and the economic ruin of many families and businesses.

As you are aware, Josephine County is one of eighteen Western Oregon counties that contain reserved Oregon and California Railroad Grant Lands. There are 715,000 acres of this land within the Medford District. These lands are unique from all other Federal lands in the region in that they were reserved as set-aside, as detailed in the O&C Sustained Yield Act of 1937, in to provide economic and social local forest communities. Provisions within the Act directed the Bureau of Land Management, acting in aid for the Department of Interior, to manage these lands primarily for the production of a sustainable yield of timber.

The O&C counties are acutely aware of just how important the O&C forests are to them. Because of this awareness, the counties, in good faith, have returned back to the Department of Interior for the last forty years 25% of the O&C timber receipts as an investment to enhance forest productivity, both the intent of the counties and the Federal government by its acceptance of the receipts was to ensure that future generations of Oregonians would continue to enjoy the benefits of timber related commerce and receive forest receipts in support of local government services. These benefits were to remain on a non-declining flow, and even

better, increase due to the large sums invested annually by the counties. It was not intended that the investments be squandered for other secondary uses in conflict with the primary O&C Act PA as proposed does place the primary emphasis on non-timber related values.

The Management Framework Plan (MFP) allows for commercially available acreage into agriculture-based management requires that restrict or entirely prohibit timber production; a departure from sustained yield principles to multiple use principles with an emphasis on preservation. This violates the very essence of the O&C Act and a long standing trust between the counties and the Federal government.

The Board of Directors for the Association of O&C Counties has analyzed each alternative presented in the Resource Management Plan (RMP) for all six planning districts in Western Oregon, including the Medford District. We wish to go on record as endorsing the changes as recommended by the Association. Such deserves very careful consideration as they release additional timber into the economy without jeopardizing other Federal restrictions such as the Endangered Species Act.

Josephine County's alternative of choice is B, which best approximates the directives of the O&C Act in providing for the stability of the local economy. After the plan and wildlife have submitted their opinion on the adequacy of the alternative as it pertains to the Endangered Species Act, and assuming it is inadequate, then we believe the PA can be modified into an alternative acceptable to Josephine County.

From the Association's study, there exists at least four opportunities to increase the Allowable Sale (ASQ) of timber without affecting the Bureau's proposed non-traditional timber management approach. The counties demand forest level to first in permitting a departure of a nondecreasing harvest policy. The one of meeting in time for the first decade. This has the immediate ameliorating effect of softening the harvest impact to follow the State Forest Practices Act Rule in reference to Riparian Management Areas, where specific guidelines allow for a programmed harvest, yet protect the resources. The third opportunity exists by updating the forest inventory. With no harvest for approximately half a decade and at the same period of time having ingrowth occurring, there should be a considerable amount of timber unaccounted for in the Bureau's current ASQ calculations. The fourth opportunity is in lowering the minimum harvest size from fifty years or greater to forty years or less.

It is our sincerest desire that you evaluate the above suggested opportunities. If we must step away from traditional approaches



Alternative. Thousands of individuals will be thrown out of work and the ripple effect throughout these timber communities will be devastating. In addition, the revenues flowing to the State from these lands will be correspondingly reduced. At the very least, local government will have to find funds to deal with the tremendous human costs of reduced OAC harvests. These revenues have been lower than needed to meet the needs. This severe problem would minimize with timely advance notice from the recent program, which limits the ability of local government to raise revenues to replace lost OAC monies or other decreasing monies. (This results from the fact that many OAC lands receive a very small portion of the 10 to 15 percent of assessed valuation available to all local government. The OAC lands receive less than one percent of the assessed valuation.) This Association and the Association of OAC Counties conducted an analysis of the social impacts of timber harvest reductions in the OAC Counties with Dr. Robert W. Lee, University of Washington. (See L. D. P. Samuels, B. Ellis, C. Nelson and C. R. Fienke, Social Impacts of Timber Harvest Reductions in the OAC Counties, University of Washington, 1991.) Among Dr. Lee's many important findings were that the incidence of spouse or child abuse, alcohol or drug abuse and other manifestations of social stress increase in response to rising unemployment, at the same time that local providers of services in these areas find themselves with diminished capacity to respond to these in need.

Dr. Lee's findings also discuss the impact of unemployment on individuals and suggested that the quick fix of timber worker retraining advocated by many may be easier said than done. He stated, "People experiencing high levels of stress often suffer from impairment of the cognitive functioning required for retraining or making other changes in their lives. Extreme work-related stress can produce symptoms resembling the 'delayed stress syndrome' from which so many Vietnam veterans suffered. When coupled with stress originating from the blurring of loggers and other wood products workers, loss of way of life and betrayal by government, many individuals are likely to suffer from both forms of self-harm and an impaired capacity to recover. Their capacity to make rational decisions about retraining, moving, or shifting occupations can be substantially reduced by such an accumulation of stress."

But, assuming that the individual displaced worker is able to work his way through and resolve these problems, there are still severe difficulties in viewing "retraining" as the preferred solution to the social and economic problems likely to result from the large reduction in the AAG as proposed in the Preferred Alternative. The facts concerning retraining contained herein are discussed more fully in a memorandum filed with the Endangered Species Committee (ESC) on February 11, 1992, titled "OAC County Post-Hearing Memorandum in Support of Exemption Requested by RMA."

- For those who are served, the job placement rates may decline in the future.
- Any increase in unemployment will be met with lower retraining success rates.
- Those who are placed in new jobs suffer substantial wage reductions.
- Job retraining is expensive.

There are very real and severe economic and social consequences and all effort should be made to mitigate against these impacts.

#### Recommendation for Proposed Action

The OAC Act, its history, and the judicial decisions which have been rendered relative to it and the impact on local government revenue and services, lead me to the conclusion that the most appropriate alternative for the action to select for the Proposed Action is Alternative B. Essentially, this means that the current land use allocations comply with the advantage of an updated timber inventory. We urge you to give Alternative B careful consideration when deciding upon the Proposed Action for your Resource Management Plan.

However, if it is determined that compliance with the Endangered Species Act (ESA) precludes the adoption of Alternative B, the Association can reluctantly accept the Preferred Alternative on the condition that certain changes are made to provide for an increase in the AAG. The only way to increase the AAG is to increase the minimum level of harvest. The Preferred Alternative poses beyond the requirements of the ESA. The Association's position is that the RMA is not allowed by the OAC Act. It is our firmly held position that the OAC Act requires that the timber harvest be set at the highest sustainable level to meet the statutory requirement for community stability and that deviations from such harvest level only occur in response to extraordinary federal laws such as the ESA. While we are not opposed to management for non-timber values, we are not opposed to within this framework. As it stands, the Preferred Alternative does not appear to recognize the requirements of the OAC Act, nor does it appear to solely occur reductions in harvest levels with the requirements of the ESA.

All this having been said, it may be that the philosophy of the Preferred Alternative, "ecosystem management," can still be utilized within the proper statutory framework. This would depend in large part on whether harvest levels under the Preferred Alternative could be increased to bring them more closely in compliance with the harvest levels required by the community stability requirements of the OAC Act, while not exceeding

Affidavits and exhibits in the record of the ESC hearings substantiate the points raised in these comments. The RMA is already in possession of these supporting materials.

Of the thousands of timber and wood products workers who have lost their jobs in the last three years, most have been unable or unwilling to obtain job retraining. There are insufficient funds to serve those currently unemployed and additional funding in significant amounts is unlikely to serve a flood of newly unemployed.

The typical worker who actually is able to enter a job retraining program is male, 43 years of age, has been in the wood products industry for over 25 years, and has a 12th grade education. Thirteen percent of those who entered such programs are high school dropouts and another 12 percent are over 55 years of age. Many workers laid off from the timber and wood products industry have spent the last three years in the industry and have lived their entire lives in communities where the wood products industry is economically and culturally dominant.

Of those who do make their way into job retraining programs, the placement success has been relatively good. Any increases in unemployment, however, will result in a reduced placement rate. One expert has stated, "Dislocated workers are already being absorbed into the job market at nearly the maximum rate possible—the job market is already saturated with dislocated workers, whether retrained or not."

In addition, for those who make it into retraining, then complete retraining, and are placed, there is almost always a substantial reduction in wages from those earned in the wood products industry. In Lane County, the average is \$2.00 per hour reduction. In Douglas County, the average is a \$3.50 per hour reduction. In Coos County, the average wage reduction for those lucky few who make it into and out of retraining is \$4.64 per hour.

The costs of retraining are substantial. The most obvious costs are the direct retraining costs. These range from \$3,800 to \$5,440 per worker trained. Other costs include plant grounds, which run from a few hundred dollars to \$2,600 per worker trained, and unemployment benefits, which normally are \$200 per week for anywhere from 10 weeks to 34 weeks, to exhaustion of benefits. In Coos County, the average time on unemployment is 35 weeks; that is expected to increase to 48 weeks in 1992.

From the foregoing, the following conclusions are inescapable:

- Funding is adequate to provide retraining to only one-third to one-half of those currently unemployed.
- Substantially increased funding is not aware of minimum

restrictions imposed by the ESA. This would require a very careful balancing of obligations by the RMA.

#### Opportunities to Increase Allowable Sale Quantity

Based upon our review of the information set forth in the OMB/IFIS, we believe strongly that several opportunities do exist for modest increases in the AAG to the point where the required balance might be achieved. These opportunities relate to the allocation and management of riparian areas, the timing of harvest, and the timing of the riparian area. The increase in AAG to be expected from these opportunities should serve to leave the impact on timber dependent communities of the precipitous drop in AAG proposed in the Preferred Alternative. The increase, if realized, would also serve to insure that management is in compliance with the OAC Act. These opportunities, and protected through modest changes in such guidance within the planning guidance concept around which the Preferred Alternative was designed. We have requested the State Director to make such changes to the State Director's guidance. Each of the opportunities will be discussed separately.

#### Riparian Management Areas (RMA)

We see an opportunity for change within the Preferred Alternative guidance for riparian area protection to provide for an increase in the AAG. Under Preferred Alternative guidance applicable to riparian area protection, the AAG can be increased to RMA and thereby segregated from acreage available for programs under harvest on a sustained yield basis. This large acreage dedicated to riparian area protection amounts to a five-fold increase in the acreage allocated for similar purposes under the current plan. According to the OMB/IFIS, all alternatives meet the minimum level requirements for the protection of riparian areas. Thus, as we see at 35,600 acres of RMA as designated in Alternative A meet a legal mandate. This being the case, it appears that the allocation of 71,700 acres to RMA, as proposed in the Preferred Alternative, amounts to a significant overprotection of the resource to the detriment of the timber industry. A more reasonable and balanced approach would be to substitute Alternative A guidance for Preferred Alternative guidance which results in RMA allocations. If Alternative A guidance were used, some 30,000 acres of forest land could be returned to the sustained yield timber production base. According to the sensitivity analysis addressing different levels of riparian protection, the AAG could be increased by 2.8 million by this action. We have recommended to the State Director that Alternative A guidance for RMA be adopted for the proposed Resource Management Plan (RMP).

D. A. Jones, District Manager  
Medford District Office  
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We have also suggested to the State Director that guidance HMA be re-examined. As we understand the guidance, the only timber harvest permitted within HMA is harvest of trees in support of resource other than timber and for limited clearings of trees for logging roads and yarding roads. In other words, acreage within HMA is not included in the base acreage used to compute the ASQ, and a programmed timber harvest will not be taken from HMA. We wish to point out that the Oregon Forest Practice Act Rules provide for growing and harvesting timber within "very special-use" areas to the extent that certain standards of protection are met. The Oregon Forest Practice Act Rules contain very specific guidelines for the number and sizes of conifer trees to be left on 1000 feet of stream length for riparian management areas of varying width. While full sustained yield production is not permitted, if silvicultural systems applicable to the Old Growth ecosystem (OGS) and/or connectivity to HMA are being applied to the HMA, we estimate that the ASQ could be increased by an estimated 1.6 MMBF. As we understand, we are talking about all of the conceptual frameworks around which the Preferred Alternative was developed were that "resource use and protection can occur in health and social well-being." You have implemented these concepts for both the OGS and C&S and have provided for the programmed harvest of timber on a sustained yield basis from such areas if the concepts of management are appropriate for OGS and C&S, then certainly the concepts are also appropriate for management of HMA, including the programmed harvest of timber on a sustained yield basis. Therefore, we have recommended to the State Director that the guidance with regard to HMA be amended to provide for programmed timber harvest from such areas subject to the rules for live tree retention set forth in the Oregon Forest Practice Act Rules.

In summary, if alternative A guidance for HMA were substituted for Preferred Alternative guidance to allow a reduction in acreage allocated to HMA, and if such guidance were also amended to permit a programmed timber harvest from HMA, such changes could result in an aggregate increase in the ASQ of an estimated 4.4 MMBF.

#### Minimum Harvest Age (MHA)

The concept of minimum harvest age was adopted in planning for the 1980's and its use has been continued in planning for the 1990's. The only issue in the youngest age class that would be subjected to regeneration harvest. From discussions with District personnel, it appears that the MHA was set at 100 years for the northern portion of the district and not a consideration

D. A. Jones, District Manager  
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for the southern portion. However, a sensitivity analysis carried out shows that an increase in ASQ could be realized if the MHA constraint was relaxed. This increase amounted to 34.3 MMBF. The date in the OMBP/RIS does not indicate to what age the MHA would drop if unconstrained. If relaxing the constraints on MHA would require regeneration harvest of timber less than 40 years old, we recommend that the MHA be constrained at 40 years. Other options to consider would be to set MHA at an age even lower than the MHA used in the Preferred Alternative or at the age of first commercial harvest.

We have recommended to the State Director that the guidance for the Preferred Alternative be amended to include one of the MHA options described above. Such a change could add upwards of 14.3 MMBF to the ASQ and help ease a most difficult timber supply situation for timber-dependent communities and industries in the Medford District more noticeably.

#### Departure from the Nondeclining Harvest Level

Departure from the nondeclining harvest level is not something that public land managers normally desire to do but there are times and circumstances when it may be the wiser thing to do. We believe that it is time to consider departure from the nondeclining harvest level for the General Forest Management Areas (GFMA) in order to provide for a temporary increase in ASQ during the next decade.

The amount of forest land available for intensive timber production has been drastically reduced under the Preferred Alternative. Under the current plan more 84 percent of forest lands were dedicated to intensive timber management; the Preferred Alternative for the 1980's dedicated only 22 percent of the forested acres to intensive timber management—a significant reduction indeed. The current ASQ for the Medford District is 213.0 MMBF; the ASQ proposed by the Preferred Alternative is 105.0 MMBF—a 51 percent reduction. Add to this scenario the reduction in timber output from the national forests in the vicinity and timber-dependent communities in southwest Oregon are faced with a dismal outlook for the future.

One way to help alleviate the situation, and to ease the impact of such a large reduction in ASQ, is to adopt departure from the nondeclining harvest level to permit a one decade increase in ASQ. Such an action would help provide for a transition from the high harvest levels of the 1980's to the reduced harvest levels projected for the future. We note that paragraph 3 of the March 18, 1989, Old Forest Resources Policy Statement provides, as follows, for departure from nondeclining harvest levels:

D. A. Jones, District Manager  
Medford District Office  
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"9. The allowable cut determination shall be based upon nondeclining harvest level over time. Departure from the nondeclining harvest level may be permitted in any direction. Any increase shall not exceed the long-term sustainable yield of the forest. Any decrease shall be economically and/or biologically justified in terms of the benefits to be gained on dependent industries and communities." (Emphasis added).

We do not know exactly how much the ASQ might be increased by departing from the nondeclining harvest level, but suggest that a 50% increase might be a reasonable estimate based on a departure of the present. We note that the original proposed State Director Guidance required a sensitivity analysis for departure from the nondeclining harvest level for the Preferred Alternative. However, this requirement was apparently dropped because the OMBP/RIS does not indicate that such an analysis was undertaken. It should be carried out to establish the level of increased ASQ.

We have recommended to the State Director that the guidance for the Preferred Alternative be amended to require departure from the nondeclining harvest level in order to add to the ASQ and contribute to community stability.

#### Updating Timber Inventory

The OMBP/RIS indicates that the inventory of forest lands to estimate the volume of timber present was completed on October 1 of such timber was current as of October 1, 1989, and that the inventory was updated annually thereafter. The OMBP/RIS also states the purpose of computing the ASQ for the various alternatives described in the OMBP/RIS. Updating the inventory of forest lands for depletion of standing timber inventory due to timber sales and for acquisition of timber inventory due to growth is required to arrive at an updated starting inventory for ASQ calculation purposes.

If the proposed RIS is implemented on October 1, 1993, as planned, five years will have passed since the timber inventory was completed. We recommend that the starting inventory for the purpose of calculating the ASQ for the proposed RIS be updated current to October 1, 1993. This should not pose a problem because of the fact that little or no timber is likely to be offered for sale during F. Y. 1993. Also, we wish to point out that for the past five years timber sale offerings have been substantially below the volume of timber that should have been offered for sale in accordance with the timber management plan approved in 1981. Therefore, it appears that acquisition of timber volume will far exceed depletion of timber volume and hence the net effect should be a starting inventory volume substantially greater than the

D. A. Jones, District Manager  
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starting inventory volume used to calculate the ASQ for the various alternatives described in the OMBP/RIS. Because a higher starting inventory volume should have a positive effect on the ASQ, we emphasize the importance of updating the timber inventory to October 1, 1993.

#### Opportunities Provided

This modification is very concerned about the large drop in ASQ proposed in the Preferred Alternative. We are not convinced that such a drastic reduction in ASQ is absolutely necessary. Rather, we do believe that there are ways to increase the ASQ above that proposed in the Preferred Alternative, and still adhere to the basic conceptual framework used to design the Preferred Alternative.

We believe that modifications to the Preferred Alternative with regard to riparian area protection, minimum harvest age, departure from even flow, and updating the timber inventory to October 1, 1993, could add at the least an estimated 34.1 MMBF to the ASQ. As noted above, we have requested the State Director to revise the policy to permit the changes we have recommended.

#### Comments on OMBP/RIS

We have attached hereto comments specific to the Medford District OMBP/RIS which are included in and make a part of this response by reference.

We are grateful for the opportunity to comment on these critically important issues and to express our views. The outcome is dependent on the decisions which you and the other districts make relative to the management of these lands for the next decade.

Sincerely,

*Rocky McLaughlin*  
Rocky McLaughlin  
resident

Attachment



COMMENTS SPECIFIC TO:  
 MEDFORD DISTRICT OAK RESOURCE MANAGEMENT PLAN  
 AND ENVIRONMENTAL IMPACT STATEMENT - AUGUST 1992\*

## VOLUME I

## SUMMARY

The allowable sale quantity (ASQ) is discussed under the topic of "Timber" (page xviii) and reported as a total for the commercial forest land base. The ASQ is also reported similarly in Table 8-1. We believe it would be helpful if the ASQ were reported by land allocation and by intensive management practices. For example, we understand the total ASQ to include production from the General Forest Management Areas (GFMA), the Old Growth Empire Areas (OGMA) and the Connectivity Areas (CA). In addition, the production from the GFMA is made up of the base volume plus volume derived from the several intensive management practices. We suggest a tabular display be used to report the ASQ on both a cubic foot and board foot basis; we also suggest that the long term sustained yield (LSTY) be displayed in the table. See Exhibit 1 for an example of such a table.

We believe it is important to keep the ASQ segregated by land allocation because of the difference in assumptions used to compute the ASQ for each allocation. We also believe it is important to identify for each intensive management practice the ASQ contributed by each individual practice.

## CHAPTER 1

We were disappointed that the Oak Resource Management Plan and Environmental Impact Statement (ORMP/EIS) was published for public comment without a discussion of the OGC Sustained Yield Act of 1937 and the relationship of said act to the Federal Land Policy and Management Act of 1976 (FPLMA). The OGC Act is a unique piece of legislation which has guided the management of the OGC lands of western Oregon for over 50 years. And as you know, the OGC Act was executed a special exemption by Sec. 701 of FPLMA insofar as the management of the timber resource is concerned. The purposes of the OGC Act and the Sec. 701 exemption are very important to this planning effort and need to be discussed in these planning documents.

\*It is not our intent to make a detailed page by page review of the entire Oak Resource Management Plan and Environmental Impact Statement. Rather, we limit our comments to several specific items/concerns that we feel need to be addressed.

## CHAPTER 4

We applaud the approach taken by the Medford District to evaluate and quantify the effects that land use allocations, harvest schedules and landscape constraints and restrictions on timber management have on timber production. We suggest, however, that to facilitate an understanding of your analysis that the data generated be displayed in tabular form showing for the Proposed Action the acreage of suitable commercial forest land (CFL) allocated for the purpose of managing or protecting all resources other than timber together with an estimate of the net annual harvestable timber therefrom. It seems that the starting point should be Alternative 3 (terms of RCP and ASQ) with incremental reductions of RCP and ASQ until the level of the Proposed action is reached. We chose Alternative 3 as the base for comparison because Alternative 3 is the alternative which most closely reflects compliance with the purpose and intent of the OGC Act. See Exhibit 2 for an example of a table to array the data. We make this request because we believe that decision makers and the public need to have with some precision the amount of timber production which will be forfeited in the enhancement and protection of resources other than timber.

We direct your attention to our opening discussion relating to the summary wherein we suggested that you include a tabular display of the ASQ. We suggest that a similar table be included in this section to permit detailing the ASQ by land allocation, i.e., GFMA, OGMA and CA, and that for the GFMA, the ASQ be disaggregated to the intensive management practices. We also suggest that the long term sustained yield (LSTY) be displayed for each alternative. The reason we ask for the LSTY is because consideration of a departure from the moderate risk action level is constrained by the long term sustained yield capacity of the land.

## CHAPTER 5

No comment.

## CHAPTER 6

We note your continued reluctance to include the term "dominant use" in the glossary even though this association has pointed out the significance of the term in commenting on State Director Guidance and in commenting on the Medford District Analysis of the Management Situation. After all, the term "dominant use" has more relevance to the management of the OGC lands than does the term "multiple use" which has been included in the glossary. We urge you to add the term "dominant use" to the glossary for the RMP.

We believe this is important because the Resource Management Plan (RMP), once adopted, will become the blueprint for managing RMP lands in the Medford District for the next ten years. As new managers come upon the scene, their first action will be to become intimately familiar with the RMP in order to effectively carry out their duties and responsibilities. Without some discussion of the OGC Act in the RMP, the full significance of the OGC lands and the purpose of these lands will very likely be lost. This is of serious concern to the eighteen OGC counties, particularly for having invested nearly one billion dollars of county funds in the OGC lands during the past 40 years to pay for a level of intensive management that very likely would not have been undertaken otherwise.

We urge you to include a discussion of the OGC Act and its purpose in the plan. We suggest that you review some of the material published early on in this planning effort which discussed the OGC Act and the relationship to FPLMA. In our opinion, Chapter 1 seems to be the appropriate place to include such a discussion.

## CHAPTER 2

Included in Chapter 2 is a section entitled Cost of Management (page 2-11) which addresses in a very general way the costs likely to be associated with implementing the various alternatives. A distinction is drawn between "traditional" timber management and "non-traditional" timber management with the Preferred Alternative considered an non-traditional timber management. The discussion points out that costs of traditional timber management "would be consistent with past management costs for this purpose" but that "costs of non-traditional" timber management as proposed in the Preferred Alternative "...would be much higher per unit of timber sold than for the other alternatives." In fact, the document states that "preliminary estimates indicate that these costs would be about 2.6 times traditional costs per unit of output in the first decade."

Unfortunately, the discussion of the cost of implementing the Preferred Alternative stops at this point and the reviewer is left to ponder the question of increased costs and the budget needed to implement the plan. We feel the abbreviated discussion of costs, particularly those costs of the Preferred Alternative, should be to be so much higher, is a serious oversight in the ORMP/EIS. We recommend that you remedy the oversight in the proposed ORMP/EIS with a full and complete discussion of the costs of management for the Proposed Action together with an estimate of the budget requirements needed to implement the plan.

## CHAPTER 3

No comment.

## VOLUME II

## CHAPTER 1

No comment.

## CHAPTER 2

We suggest you include in Appendix 2-6-c a description of the procedure used to compute the Allowable sale quantity for the Preferred Alternative (and/or Proposed Action). We believe this is necessary in order to describe how the following components were included in computing the allowable sale quantity: (1) extension of a portion of the stand on harvest; (2) maintenance of stands with multiple canopy layers; (3) maintenance of wider tree spacing by means of a series of density management cuttings; (4) management on longer rotation; and (5) expected timber yields from stands so managed.

Since the current timber volume for the Medford District is based on a 1988 timber inventory, we suggest you also include in Appendix 2-6-c a description of the procedure used to update the timber inventory to the present time and a tabular display of the results of the update.

## CHAPTER 3

No comment.

## CHAPTER 4

We suggest you include a sensitivity analysis in Appendix 4-1 to determine the effect of the Preferred Alternative (and/or Proposed Action) the ASQ for a departure of ten percent above the recommended harvest level, provided that the resulting increase in ASQ does not exceed the long term sustained yield capacity. We suggest you also determine the highest level of departure permissible during the first decade which is within the LSTY constraint.

Exhibit 1  
Allowable Sale Quantity by Land Allocation and Practice

Land Allocation/Fraction	ALTERNATIVE						
	HA	A	B	C	D	E	FAC
DCFA							
Deer	NRCP						
	NRCP						
FCY	NRCP						
	NRCP						
Fert.	NRCP						
	NRCP						
Stand Con.	NRCP						
	NRCP						
Genetics	NRCP						
	NRCP						
OGIA	NRCP						
	NRCP						
CA	NRCP						
	NRCP						
TOTAL	NRCP						
	NRCP						
LTFY	NRCP						
	NRCP						

\*Preferred Alternative (and/or Proposed Action)

Exhibit 2  
Effects on Timber Production Resulting From

Enhancement of Other Uses

(Alternative B Compared to Proposed Action)

Alternative B (Baseline)	ACRES (SCT) 11			AND	
	NRCP	NRCP	NRCP	NRCP	NRCP
Losses:	422,700	44.0	264.0		
Less:					
Air					
Soils					
Water Resources					
Biological Diversity					
Vegetation					
Algalia Range					
Wildlife Habitat					
Fish					
Special Status Species					
Special Areas					
Cultural Resources					
Visual Resources					
Wild Rivers					
Recreation					
Energy & Minerals					
Rural Interface Areas					
Total Reduction					

Proposed Action

\*Available for Intensive Management

1418



December 14, 1992

Dean Bibler, State Director  
Bureau of Land Management  
Department of the Interior  
PO Box 2965  
Portland, OR 97208

Dear Mr. Bibler:

The Association of Oregon Counties, representing all 36 counties of the State of Oregon, supports the comments submitted to you by the Association of O&C Counties on the Draft Resource Management Plans/Environmental Impact Statements for the five districts in Western Oregon and the Lakeview district.

Although AOC as an organization was not directly involved in preparation of those comments, there are solid reasons why we can support them without hesitation.

\*AOC is well aware of the unique history of the O&C Act and its purpose to provide local community stability through the dominant use of these lands for timber production.

\*The findings by Dr. Robert G. Lee and associates of potentially severe social and economic consequences, as discussed in the O&C Counties' comments, were based on a study funded jointly by the Association of O&C Counties and AOC (Social Impacts of Alternative Timber Harvest Reductions on Federal Lands in O&C Counties, June, 1991). Consequently, AOC is very familiar with findings and conclusions of the study, and share with the O&C Counties a deep concern about very real severe consequences if every effort is not made to mitigate potential impacts.

1418

\*Included in the comments are technical forest management suggestions that could produce within your preferred alternative an additional 200 million board feet of annual timber harvest. These suggestions were primarily developed by Herb Haglund, a private forestry consultant well known both to you as a former career BLM staff member and to AOC as a former contractor with us. Herb developed comments in 1990 for AOC that were intended to improve draft "State Alternatives" to national forest plans. Our effort was an unqualified success that resulted in significant "fine tuning" of "State Alternatives". This success was directly related to Herb's consistently reasonable, practical, and creative analysis. AOC encourages your agency to take full advantage of Herb's suggestions for the benefit of your plans and local communities affected.

As an organization devoted to the general welfare of Oregonians, AOC greatly appreciates this opportunity to offer our support of comments submitted by the Association of O&C Counties. AOC urges you to give them great weight as you proceed with your difficult task of planning O&C forest management for this decade.

Sincerely,

Michael J. Sykes  
President

c. Association of O&C Counties



# ELKTON PUBLIC SCHOOLS

District No. 34 Elkton, Oregon

Elkton High School  
Chadwick "New" Acad. Soc. (Prestige)  
75 S. 1st St.  
Elkton, OR 97036  
(503) 864-2217 or 754-2027

Elkton Elementary School  
300 George Street  
P.O. Box 120  
Elkton, OR 97036  
(503) 864-2112

Elkton School Dist. Business Office  
300 George Street  
P.O. Box 120  
Elkton, OR 97036  
(503) 864-2112

December 17, 1992

District Manager  
Bureau of Land Management  
3640 Bliddle Road  
Medford Oregon 97504

Dear District Manager:

Enclosed is this letter as Elkton School District's Board of Directors' comments on the BLM draft Resource Management Plan and Environmental Impact Statement. We are elected members of the community and are charged with providing the best possible education for the children of our district. A reduction in Federal Forest fees would be a further reduction in revenue for our district. In fact, the revenues we received in this field are already down approximately \$20,000 over the prior two years, i.e., \$70,000 from \$90,000. This does not reflect the increase in unemployment or the decline in living standards experienced by some of our patrons who have been employed in the wood-products industry.

Our school district is already deeply affected by Budget Measure 5 and expects to be impacted negatively even more over the next few years. Due to reductions in revenue, our district has eliminated music for grades K-12, see full time teaching position, and two instructional assistants.

Finally, we live in a rural county and are dependent upon services provided through our county. This summer, the county road department helped our district by resurfacing the grade school parking area and two lane and shared us for only materials. Our high school students almost daily use resources from the Douglas County Library through interlibrary loan. There if we had more are almost solely dependent on county roads and we need them maintained for safe transportation of our students.

We, the Board of Directors of Elkton School District request that this plan be given reconsideration. The plan, as currently proposed, will have a devastating impact on our school district.

Sincerely yours,

J. A. Smith

Jeff Smith

Board Chairman

P.O. Box 310

Elkton, Oregon 97036

ELKTON SCHOOL DISTRICT NO. 34 IS AN EQUAL OPPORTUNITY EMPLOYER

D. Dean Williams, Board Chairman  
P.O. Box 2280  
Portland, OR 97208

City of Drain

P.O. Box 100 • Drain, Oregon 97024

City of Drain

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1427

RESOLUTION NO. R-9293-03

## A RESOLUTION IN SUPPORT OF CONTINUED MANAGEMENT OF O & C TIMBERLANDS

Whereas, the Bureau of Land Management has requested public input on its ten-year land and resource management plan, and

Whereas, the health, peace and safety of the people of Douglas County are affected by the alternative selected by the BLM for the management of O & C timberlands, and

Whereas, the natural resources provided through aggressive management of federal lands under the O & C Sustained Yield Act of 1937 has contributed to social and economic stability in 18 Western Oregon counties, including Douglas County, and

Whereas, the counties have invested more than one billion dollars to fund intensive forest management on these lands with the explicit expectation of an ongoing return on this investment, and

Whereas, O & C lands continue to provide a reliable employment base for many Oregon communities, and

Whereas O & C lands also provide diverse and sustainable habitat for fish and wildlife, clean air and water, and outdoor recreation opportunities, and

Whereas, these lands should continue to provide economic stability, healthy and productive forests and reliable employment base,

Therefore, be it resolved that the City of Drain supports the continued management of these lands in accordance with the O & C Sustained Yield Act of 1937 to provide a stable and predictable level of timber harvest for Oregon communities while considering other resource values, and

Be it resolved that we support the principles of multiple use for these O & C lands which include management for timber, water, recreation and wildlife, and

Be it further resolved that we encourage legislation that would enact a balance management plan into law by the Congress of the United States of America and remove management decisions from the federal court system.

Passed by the City Council of the City of Drain, Douglas County, Oregon this 14th day of December, 1992.

ATTEST: Bill Evans, City Admin. *Bill Evans*  
Wes Anderson, Council Pres.

## Town of Butte Falls

In the End of Five Miles, Five Miles, Five Miles and South  
BUTTE FALLS, OREGON 97103

December 19, 1992

Recommendation for achieving consistency by the 1992 draft.  
Measures District Resource Management Plan with the revised  
Butte Falls Comprehensive Plan. The following for land  
County, the State of Oregon and the... the following for land  
development and city improvement and the following for land  
twenty years... [from page 11 ORDINANCE # 208] for the  
Town of Butte Falls Inc. - Butte Falls, Oregon 97103

From: Alvin Thompson, Mayor-Town of Butte Falls  
Steve Strouten, Chair-Butte Falls Planning Commission  
Dan Murphy, Deputy Springs 75 Street...  
John Vetter, Watershed Coordinator and Director BREC  
To: David Jones, District Manager-Medford RM District Office  
3000 Siskiyou Road, Medford, OR 97504

According to Medford District Resource Management Plan page XXIII  
RM Planning regulations require that RMP be consistent with  
officially approved or adopted... retained plans, and the po-  
licies and procedures shall of the Federal Agencies, state and  
local... and Indian Tribes.

In 1992 the RMP had the opportunity to provide input on the  
development of the Town of Butte Falls Comprehensive Plan (BFCP) see  
attachments page 1 through 3.

RMP's BFCP falls to be consistent with the Butte Falls Comprehensive  
Plan in the following areas:

1. On page 44 of BFCP the goal is to conserve forest lands for forest  
uses and under c. find... Touch lands used in open, riparian, channel  
provide animal habitat, provide open space and tranquility, provide  
for jobs and renewable resources, offer visual beauty and scenic views,  
and offer recreational opportunities... "The RMP provided alternative  
units any area in the Butte Falls vicinity... visual exposure other  
than the Class IV. To achieve consistency with the Butte Falls Com-  
prehensive Plan we recommend that language be created that acknowledge  
and respect scenic qualities in RM class IV in the following vicinity:  
travel corridors including: Cobble Hill rd, Butte Falls Prospect  
Highway, designated route of the new Butte Basin Travel Loop  
c. Obenbach road d. "the Butte Falls Highway from Highway 62 to  
Butte Falls, e. Crawford Road, f. Butte Basin Travel Loop  
h. Indegrove road i. Finceline road j. Flankline road from Butte  
Falls to Highway 101, designated route of the new Big Mouth Basin  
Travel Loop) Neighborhood viewsheds are also recommended to be  
language created that recognize RM in the vicinity of Cobble Hill  
for scenic views from: The Town of Butte Falls, Little Tokyo, Harby,  
landscapes and the surrounding RM in the vicinity of Cobble Hill  
road. Finally RM Class I protection language is needed that recog-  
nizes and acknowledges our scenic and wild river corridor of

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## Town of Butte Falls

In the End of Five Miles, Five Miles, Five Miles and South  
BUTTE FALLS, OREGON 97103

1267

category 21 Inconsistencies of "92 draft RMP to BUTTE FALLS PLANS  
(CONTINUED) RM class I protection language for Butte Falls  
with/without rivers that include a, Clark Creek and Clark Creek  
Grave and 2-bio, waterfalls, c. Newell Creek and Newell Creek  
and Petrified Forest Creek Bed, d. South Fork of Butte Creek with  
Covefort Falls, Butte Falls, and Little Tokyo Falls and wild road of  
Blue Hacer, Plinkum, Cobb, and native wild and native disjunct pop-  
ulations of native rainbow and cutthroat trout in tributaries d. North  
Fork of Big Butte Creek into the Cascade with South Fork the last  
Cascade populations of nonendemic fish of the Willa Metcalf Cascade  
branches. e. all minor tributaries of South Fork and North Fork

2. On page 47 of the BFCP "Forest land and agricultural land beyond  
the Urban Growth Boundary should be preserved and utilized for the  
production of renewable resources." The RM draft RMP is inconsistent with  
these objectives in Chapter 7, p. 41/42. By stating that the RM  
emphasis is placed on maintenance of high levels of sustainable re-  
source production... In recognition of low annual precipitation  
and to achieve consistency with the BFCP add the following statement:  
"The Butte Falls area will be part of the BFCP."

3. On page 53 of the BFCP the goal is to conserve open space and  
protect natural and scenic resources. Finally natural and scenic re-  
sources of the area should be protected for present enjoyment and future  
generations. The RM draft RMP/EIS is inconsistent with this goal  
by saying in chapter 1-39 under Future Resources "undisturbed  
land in the northern OPMA would be managed as RM class IV (with  
no management guidelines except 8-4 trees per acre) To achieve con-  
sistency with the Butte Falls Comprehensive Plan the following lan-  
guage will work: "The Butte Falls area will be managed as inventoried  
with certain areas having a RM class I. (see category 1 draft RMP-  
EIS inconsistency on this page everything not RM class I is inventoried  
by RM class II.)"

4. On page 53 of the Butte Falls Comprehensive Plan the goal is to  
maintain and improve the quality of the air water and land resources  
of the state. The town currently enjoys more high quality untreated  
water. The RM draft RMP/EIS is inconsistent with the maintenance and  
improvement of our water quality in chapter 5-4 where it is stated  
that the management goal in watershed providing surface water used  
by public water systems serving municipalities would be to provide  
feasible water at the system points of intake. "To provide consistency,  
substitute... potential water for treatable water. The RM draft RMP  
to establish a goal for ground water resources as well as surface water  
resources, the town should establish water at the point of intake. RM  
communities like Butte Falls can not afford to treat water prior to  
use, which would cost an estimated \$100,000 if feasible for certain  
contaminants. The loss of the Spring as a domestic water supply if  
the RM draft RMP is implemented will be detrimental to the community  
times. The city watershed has provided this high quality water

## Town of Butte Falls

In the End of Five Miles, Five Miles, Five Miles and South  
BUTTE FALLS, OREGON 97103

1267

## Town of Butte Falls

In the End of Five Miles, Five Miles, Five Miles and South  
BUTTE FALLS, OREGON 97103

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category 4 Inconsistencies of "92 draft RMP to Butte Falls Resource  
Management Plans (continued)

In the past through the present and there is no reason to change the  
objective and impact Butte Falls, on page 1-5, the laws/enforce  
for water quality use the creation... for special needs such as a municipal and domestic supply... The RM  
plan to assist the Town of Butte Falls in securing watershed protection  
(immediately j. initiate rehabilitation activities, defer all other  
projects, and begin this winter the necessary cooperation to im-  
plement the upcoming Spring Springs Master Plan. In July 1992,  
the Oregon Health Department (OHD) will require acceptance of land  
fill and treatment. Any delay in RM cooperation could sig-  
nificantly impact the outcome of these requirements. Butte Falls  
needs watershed control and implemented watershed plans and would like  
to use watershed planning cooperation with RM as a prototype for  
other landowners. In the RM plan, pg 2-3, we read the following  
and exchanges/assurances could be used to obtain fair plan  
national areas or to block up RM ownership within watersheds.  
On pg 1-5, the laws/enforce for water quality state the question "what  
should RM do to manage for special needs such as a municipal and do-  
mestic supply" in addition to the above mentioned need for immediate water-  
shed plan implementation, there is an associated need to begin ex-  
isting alternatives to block Mexico ownership for outright purchase by  
the town or watershed protection via the Oregon State Forest Practices  
Act. Further alternative use immediately feasible based on eco-  
nomics and the other based on a lack of regulatory substance.  
The Town of Butte Falls feels strongly that public lands should be used  
in the public's best interest - block on the watershed via RM own-  
ership. We are looking forward to working with you after the first of  
year to begin all of these efforts. We need the watershed protection  
in the approved resource management plan no there is consistency be-  
tween the RM RMP and both Town of Butte Falls and other State &  
Federal Agency plan and equipment. It is understood that there  
will be a working transaction where guidance from the existing RMP  
may govern cooperation.

We have included the 8 pages of excerpts referred to in this letter.  
from the Butte Falls Comprehensive Plan. The full document is avail-  
able for your review. This information and future... established by contacting Steve Strouten-Box 282-Butte Falls, Oregon  
97103 or call 955-1777

Sincerely,

Steve Strouten-BREC Director  
Watershed Coordinator  
Dan Murphy-Deputy Director BREC  
Alvin Thompson

Alvin Thompson-Mayor  
/Alvin Thompson  
Date Vetter-Planning Commission  
John Vetter

This letter available for public review and posting.

To: David Jones  
From: Butte Falls Area Watershed Coordinator

These requests for alternatives were  
presented to me 12/12/92. As an infor-  
mation relating to these, our water  
and residents become available, we  
will forward it to you.

Please find enclosed 2 origin  
letters with 3 pages of a status form  
and 9 pages of our watershed form

The Butte Falls Strategic Plan, The  
Butte Falls Comprehensive Plan, and  
the Spring Springs Master Plan  
Plan Draft Final - 4/93, along with  
recent analysis of our economic decline,  
(see other Town comments on draft  
BLM RMP/EIS) consistently support  
these citizen's interest in these matters.

Please incorporate as pertinent to our  
community's concerns

I thank you  
Steve Strouten  
Director BREC Watershed Coordinator







We do not believe wild fires will be tolerated and we do not believe these are sufficient days in the year when controlled burns may be conducted without causing severe incursions in the Riparian Valley.

Forest incursions should be kept at endemic and not epidemic levels. We believe some level of stocking control needs to be done by humans to maintain healthy forests. In order for the program to be realistic and applied, it should generate revenue sufficient to cover treatment costs. This means logging, but probably light selective cuts.

#### Timber Harvest

As shown on the attached chart, a significant amount of the timber harvested in Jackson and Josephine County has come from federal lands managed under even-aged systems. The revenue per MBF harvested was fairly high. Under the proposed plan, both the volume and the revenue per MBF will be down. These two trends will probably not be overcome by price increases. Every effort should be made to pursue economically efficient harvest practices that meet resource objectives to minimize the projected adverse impact on timber revenues. Given the number of jobs in the forest management must deal with daily, it is easy to spend money in mitigation and forget about economically efficient operations. When this happens, an unnecessary burden is put on local county governments.

For a variety of reasons under ecosystem management, we propose light selective cuts to control stocking. The selective cuts will not do much to improve cable and helicopter logging systems to maintain old growth characteristics.

Stumpage run per MBF may be quite low as a result of these management techniques. This should not be interpreted as a timber subsidy or insignificant volume. The purpose of these light selective cuts is to produce healthy forests by not allowing them to become overstocked. This volume will be purchased and processed locally producing payroll, payroll generates business and this business as well as the employee pay many forms of property and income taxes. These taxes significantly benefit local governments, and in turn, communities.

#### Natural Conditions

Much of the proposed plan appears to follow a philosophy that "natural conditions" are the desired future conditions. The logic is that all the species of plants and animals evolved under these conditions and therefore, if we manage the forest for these conditions, all species of plants and animals will survive. The extreme of this logic would appear to be no intervention by man.

This philosophy concerns us because without wild fires or a large controlled burn program, we are in fact managing the forest by excluding fire. People living in the

forest also fear fires and residential developments are only going to increase in size and frequency. We can't go back to "natural conditions".

We are also unsure what "natural conditions" means. We probably know what it isn't but we don't know specifically what it is. Probably the same is true for good fish habitat or good wildlife habitat. We know what isn't good, but we probably do not know what is. We suggest the BLM start a carefully designed monitoring program so we have the necessary information to describe for the next planning interval what good habitat is. This will require a large coordinated program with the USFS, private landowners, and major universities.

In summary the emphasis should not be on "natural conditions" but should be on healthy forests which contain the attributes of good habitat and are spatially distributed to ensure survival of all the different plant and animal species. Management systems need to be developed to create desirable habitats, in socially acceptable treatments, which produce enough revenue to cover their costs. People need to play an active role in managing the forest to achieve a desired future condition.

#### Landscapes Management

Traditional forest management was based on the "stand level." As we pursue "Ecosystem Management" we will be looking at landscapes on much larger scales. As we leave over-aged management systems we will be doing more selective cuts. The impacts per acre where harvesting occurs will be lower but the impacts will be over larger areas. If the impacts are to be manageable, society needs to keep as large a land base as possible available for treatment. This shouldn't reduce protection because new plans protect riparian areas, ACOs, visual corridors, habitat, and the many other set asides, which encompass over 55 % of the Medford District lands.

Large landscapes legally set aside will, over time, contain heavy mortality and will support large wildfires. This will cause just as much public concern as clear cuts. Landscapes can be green and beautiful but it will not be consistently secure without a well executed plan of stocking control.

#### Riparian Areas

There has been considerable public concern about the health and ability of salmon to survive currently and in the future. This concern is warranted and deserves considerable attention. The citizens of the United States enjoy "low" their fishing experiences and many look forward during their working years to the time they can retire and fish.

The major issues appear to be the following:

- 1) Large woody debris. Research shows stream areas are short of large woody debris to form pools and riffles. This is caused by logging of logs at areas in streams, both under contract by the BLM and reclaimed by both foresters and biologists. Current debate seems to focus on amount and placement, not need.
- 2) "Good fish habitat" is to be created, there needs to be an understanding of the interaction between stream temperature, shade, food and fish health, or capacity to grow. A major research project needs to be completed to define how these interactions improve or degrade habitat. In the short run it appears cold waters and shade by a mixture of hardwoods and conifers is desirable.
- 3) Harvest levels of salmon need careful review. Particularly the harvest of wild salmon. If the harvest rates are too high, no amount of habitat protection will produce viable populations of salmon.
- 4) Downstream habitat has been significantly altered as estuaries have been filled, flood plains diked and made into productive farm land and water used for irrigation. We also have stream run-off from our cities, dams, various point sources of pollution and significant human developments along these stream courses. If the fish can't grow large enough to survive in the ocean, absolute protection of forest habitat will be of little value.
- 5) Natural predators of salmon also need to be carefully monitored. Seals, sea lions, chad all eat salmon or compete for the food salmon need to grow. When these predators are over protected, salmon populations can suffer significantly.
- 6) Once the salmon are off shore international treaties, commercial fishing, and multi-state harvest rates can impact their survival and need careful monitoring and control.

Management of BLM riparian areas is important but only a small part of the total salmon population decline. We have two recommendations the BLM should consider.

- 1) The key to protection of water resources, fisheries and water quality is the width of the RMA's. The PA is a good step forward, but given existing conditions, providing habitat of salmon and steelhead needs, the need for restoration and the little or no protection of 73% of the stream.

While, it is suggested additional protection be considered for 1st and 2nd order intermittent streams and their increases in the RMA's overall, be considered. Once stream surveys show adequate woody debris exist and other studies show are being met, then opportunities for entry into the RMA's should be considered for maintaining healthy forests.

- 2) The BLM needs to take an active role in the larger national effort to restore salmon populations. The BLM needs to support research, encourage cooperation and ensure their activities are not contributing to the problem, or in the same time not over-protecting the areas around streams causing stands to become overstocked and, therefore, unsustainable.

#### Stocking Control

We have used this term without carefully defining what we mean. We as a council probably can't define the term for the BLM and then clearly state our responsibility. We do ask that the BLM carefully consider the following:

- 1) The southern Oregon forest is primarily a mixed conifer forest. This forest has many species of hardwoods and conifers which are adapted to grow together and reach its periodically well on certain sites. Stocking control should not significantly alter this natural species diversity but should remove the weaker trees on each site.
- 2) Stags and large woody debris are important for many species of wildlife. Some species need to be left to die and fall to the forest floor. Our concern is that if all the trees are left to die naturally and we continue to exclude fire these forests will become serious fire hazards and probably never produce optimum habitat for fish, wildlife, or humans. It is a matter of deciding how much of the forest growth should be left to recycle and how much can be removed. There is a balance.
- 3) People have a need for old-growth ecosystems and for old-growth forest. Old growth wood forest has attributes as well as structural characteristics preferred by U.S. citizens and people world-wide. Federal forests have the capability of producing old-growth forest and should. Stumpage revenue is a consideration but so is the old-growth ecosystem, because it contributes to a healthier environment. If old-growth forest comes primarily from light selective cuts and produces insignificant amounts of stumpage but allows for healthy forests, the need for restoration becomes significant. We ask that the BLM use its many disciplines to design stocking control efforts which meet these multiple needs.
- 4) The wildlife biologists need to take an active role in designing stocking control treatments. Foresters and loggers have the capability of harvesting any site they desired. The manufacturing facilities in the Rogue Valley can use just about any

kind of fiber the BLM can produce. All the people with all their skills should be used to come up with stocking control efforts to produce healthy productive forests. These people have not often wanted their efforts protecting special interests instead of developing good plans. BLM managers need to lead thoughtful discussions. Everyone needs to be heard, their concerns accommodated, but constructive plans and activities also need to come. Foresters and wildlife biologists need to learn how to help each other meet all objectives.

#### World Demand for Fiber

No government has survived that tried to lower the standard of living of its citizens. Americans need wood for their expanding population. If American forests do not provide this wood it will come from third-world countries.

We believe the type of management the BLM is proposing is responsible. Fish and wildlife resources are addressed. Public concerns is allowed to be expressed. BLM forests have been important contributors to the American way of life.

If BLM forests are not used and replanted, where will the wood come from? Will these forests be as carefully managed? We believe they will not be. We are citizens who have many needs and we would like those needs to be partially fulfilled by BLM forests. The challenge to you is to meet those needs in a sustainable way.

Based on our analysis shown in Appendix A, we encourage BLM to reanalyze the opportunities for mortality harvest and density management in the GSEAs, keeping with the objectives for these areas with the purpose of maintaining health of these forests.

In summary, we believe the key issues regarding management of these public forests revolve around forest health, water quality, and community stability. BLM has the opportunity to either be a part of the problem or part of the solution with this RMP. We believe BLM should contribute to the solution and feel that active management of forest lands rather than setting aside large blocks of land is the only way to wisely address these resource issues/problems.

We recognize this plan may be a significant change in management philosophy due to the broad way it is approaching these resource issues. However, we believe that managing to provide for salmon, wildlife, water quality, community protection, and local employment can go hand-in-hand without adverse effects to any of these values.

It should be recognized the decisions made by BLM will have national and global consequences. Reducing timber supplies will drive up the price of lumber for home building, thereby affecting the capability of many to own homes.

The following discussion of the OAC Act and its history illustrates and emphasizes our concern for community stability.

The OAC Act mandates managing for our rural resource dependent communities in maintaining their stability. I believe that a 50% reduction cannot maintain the stability of these rural communities. It will produce the results outlined above. When you reduce and remove jobs when mills close and logging jobs stop the workers are unemployed. Domestic violence is present in many homes that lose income. People lose their sense of identity and the community loses a sense of worth. The sense of purpose is removed, even if the community survives, the elements of stability are gone and it's a matter of time before the community is dismantled. The retail establishments and food services cannot survive without customers. They close.

The reduced level of harvest cannot maintain stable resource-dependent communities. The money for remaining will not sustain even a third of the displaced workers. Other woods jobs do not generate enough income to pay wages, thus the money for eco-system jobs must come from the Federal General Fund. This may not be possible with the extraordinary Federal debt.

The second solution would be to maintain a higher level of wood supply to maintain the community stability. There are alternatives that will allow for a higher wood production and still meet the mandates of Endangered Species Act.

If jobs are not available, the resource-based rural community will sustain only those who don't need jobs i.e. the retirement community. If the community survives, this change in character of the community is not necessary. We can manage for ecosystem values and community stability.

Ann Clarke, Council Chair

Beginning with the 1866 grant, the reversion Act of 1916, and the 1937 OAC Organic Act and that they are to be managed for the stability of local communities and industries through the production of timber under the principles of sustained yield.

The 1937 Act directs the Department of the Interior to manage these unique lands under the conservation principles of sustained yield primarily for timber production and, secondarily, for other limited purposes listed in the Act. The Federal Land Policy and Management Act of 1976 (FLPMA) specifically exempts the OAC lands from the provisions of FLPMA in the event of conflict with or inconsistency between FLPMA and the OAC Act insofar as they relate to the management of timber.

The dedication of these lands to local purposes has inspired the Congress since 1953 to freeze one-third of their statutory share (50% instead of 75%) through annual rations on Department of Interior Appropriations Acts. The countries' annual relinquishment of one-third of their statutory entitlement has been based on the understanding that the foregone country monies would be appropriated for protection and intensified sustained yield timber production. The federal government has, until recently, lived up to its part of the bargain, too. The result is that a highly productive, well-balanced forest has evolved that is second to none in the world. It has been estimated by the BLM that there was approximately 50 billion board feet of merchantable timber on these lands in 1937. The latest inventory stands at 49 billion board feet. With over 40 billion harvested since 1937, nearly something has been done right and the concept of sustained yield timber production has been proven.

Recent judicial opinions have affirmed that the OAC lands are reserved for purposes different from other federal lands. Other federal lands are typically managed to accomplish national objectives. The OAC lands are to be managed for the benefit of the local economy and to promote community stability. Timber production is the dominant use for these lands.

A definition of Community stability might be an interlocking group of people in a common area, with a common history, and with common social, economic and/or political interests with the strength as a community to stand and endure. (Whistler)

Community members in a stable community have a sense of place, a sense of identity, and a sense of purpose. They stay in the community for a long time. The rural communities that have been reliant on natural resources for generations have stability, a sense of community, et al. How much can be removed before the community becomes unstable?

Remove the jobs - the income source - and all other places seem to follow. A family can't afford a house, food, clothes or car without good wages. When the wood supply grows scarce mills close. Log trailers are out of work. Even if the wood supply increases again the mills and mills are gone. The human services, schools, mental health services are diminished because they are dependent on timber revenues. Police protection is severely reduced because it is dependent on timber revenues.

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